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40¢

THE TREE OF TIME

a new novel by
DAMON KNIGHT

ROBERT F. YOUNG

AVRAM DAVIDSON

ISAAC ASIMOV



Fantasy and Science Fiction

DECEMBER *Including Venture Science Fiction*

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"As a very small boy" said Damon Knight, "I was patted on the head by General Pershing." Asked what effect this had had upon him, Mr. Knight puffed reflectively upon a Rum Crook cigar, and said, "None whatsoever. I was born in Hood River, Oregon, in 1922," he continued. "I was an only child, both my parents were schoolteachers, and I was hooked early by reading—especially by Fantasy. I discovered Science Fiction at the age of eleven . . . can remember sitting bug-eyed in a Portland hotel room, where I was quarantined for measles, reading The Son of Old Faithful, by Raymond Z. Gallun. I had my first literary success when I was eighteen. The printers dropped out the key word and nobody understood the story . . . I didn't get paid for it, either. Then I came to New York and shared various communal apartments with the Futurians, a now-defunct SF fan group, and did some SF illustration, which is best forgotten. What next? I edited pulp magazines for Popular Publications, worked for one of those literary agencies where they charge reading-fees, and tried to paint. I'd been writing sporadically, and then in 1950 I began to work at it full time. I'm married to Kate Wilhelm and live in a large, sensitive Victorian house. I like cats in moderation. My writings include three novels, two collections of stories, one book of critical essays (IN SEARCH OF WONDER, Advent); I've had stories in twenty-odd anthologies and edited three of my own. I just wrote a screenplay and am looking for a sucker—ah—entrepreneur—to produce it. I like kosher frankfurters, but in religion I am a Moon Worshipper." Mr. Knight is also too modest . . . what we have seen of his painting is quite good. His delineation here of a future and decadent society may have been matched (as, for example, by Damon Knight, in HELL'S PAVEMENT) but cannot easily have been surpassed. Here, are The Search, The Quest, The Chase, between the nearer and the farther future; the effete Lenlu Din, the quasi-human Lenlu Om, the hideous and infinitely dangerous Zug; tied together by the invisible thread which was Gordon Naismith's missing memory; and all, all, in the inimitable and classic prose which is the hallmark of Damon Knight.

THE TREE OF TIME

by Damon Knight

CHAPTER ONE

THE BANKED, FAN-SHAPED classroom was silent with attention.

"And now," said Professor Gordon Naismith, "watch closely. I drop the charged particle into the tank." He tripped the release of the mechanism suspended over the big glass tank, and saw a silvery spicule drop, almost too quickly to follow, into the clear liquid.

"Contact with other partially charged molecules releases the time energy," said Naismith, watching a sudden silvery cloud spread from the bottom of the tank, "and, as you see—"

The silvery cloud grew rapidly, advancing on a wave front, a beautifully symmetrical curve that was determined by two factors: gravity, and the kinetic loss of the conversion process. It was perfect beauty, far beyond any curve of flesh or any line drawn by an artist, and Naismith watched it with a painful tightness in his throat, although he had seen it a hundred times before.

Now the change was complete.

The tank was full of silvery fluid, opaque, mirror-bright and luminous. "All the liquid has now been raised to a higher temporal energy level," Naismith told the class, "and is in the state you may have heard described as 'quasi-matter.' Tomorrow, when we begin our experiments on this tank, we will see that it has some very odd physical properties. However, that concludes today's demonstration. Are there any questions?"

A student signaled with his desk light. Naismith glanced at the name-plate. "Yes, Hinkel?" He stood beside the table on the dais, tall and big-framed in his laboratory smock, aware as he answered the students' questions that eight other Naismiths, in the other identical classrooms that radiated from a common center, were also standing, like eight mirror images of himself, also answering questions. It gave him an eerie shiver, just for a moment, to realize that he himself was one of the doppelgangers, not the "real" Naismith—somehow that was almost impossible to accept, no matter how often one went through the experience . . .

then the moment passed, and he went on talking, his voice controlled and resonant.

The tone sounded, and the students began to stir, gathering their recording equipment and sliding out of their seats.

Naismith turned and fumbled for the duplicator control. The round brownish-black knob was hard to see, like a floating shadow on the tabletop. He found it at last, and turned it clockwise.

At once the half-empty classroom vanished. He was in the tiny, circular control room, alone except for the duplicator apparatus. His knees suddenly weak, he leaned against the demonstration table. Discordant memories swarmed through his head—nine sets of them, all at once, like interfering video broadcasts. It was hard to take, just for a moment, but after two years of it he was an experienced multiple-class teacher, and the nine sets of memories settled quickly into place in his mind.

As he prepared to leave, he became aware of an odd thing that had happened. The demonstration itself had been exactly the same in all nine classrooms, of course; it was only the questions afterward that had been different, and even those followed a familiar pattern.

But one of the students in—which was it? classroom 7—had stepped up to the platform just as he was about to leave, and had said something extraordinary.

He stood still, trying to bring the memory into sharper focus. It was a dark-skinned girl who sat in the second row: Lall was her name, probably Indian, although it was odd that she sat apart from the whispering, giggling group of Indian girls, bright in their saris and gold earrings, who perched at the top of the classroom. She had looked up at him with her oddly disturbing amber eyes, and had said in a distinct voice: "Professor, what is a zug?"

Nonsensical question! It had nothing to do with the demonstration, or with temporal energy at all—in fact, he was sure there was no such word in the vocabulary of physics. And yet it was odd what a shock had gone through him at her words: as if, deep down in his subconscious, the question *did* mean something—and something vital. He could remember snapping to attention, all his senses taut, a cold sweat beading on his forehead. . . .

And then what? What had he replied?

Nothing.

At that moment, the action of turning the control knob had been completed, and he had come out of the multiple state. Then the shock of re-integrating his consciousness, and now . . .

Zug.

The word had an unpleasant sound, somehow; it made a shudder of distaste run up his spine.

Probably the girl was disturbed, that was all; he would put in a query to the college psychiatric office.

But as he left the control room, taking the rear stairs to his office, the feeling of vague apprehension and unease lingered. Perhaps it was the strain of multiple-class work; not everyone could bear it. But he was proud of his ability to stand up under the load; he had never felt like this after a class.

He finished his day's record-keeping and left quickly, anxious to be out in the air. The afternoon was sunny and warm as he walked across the campus; he could hear the surf in the distance, and the Inglewood-Ventura monorail went hushing across, bright cream and tan against the blue sky.

Students were walking in little groups along the gravel paths between the flame trees. The lawns were richly green, neat and trim. The scene was familiar, soothing . . . and not entirely real.

It depressed him to realize that after four years, he still felt essentially disoriented. Everyone said he had made a remarkable recovery; he had passed his refresher courses with high marks, gotten his teaching license renewed: now he was established, competent . . . and after all, these four years were all the memory he had: so why couldn't he settle down and feel at home?

Why should he feel there was

some terrible secret buried in his past?

Irritated, he tried to shake off the mood, but the girl and her question kept coming back to the surface of his mind. It was ridiculous, and yet he couldn't help wondering if perhaps she had some connection with the lost thirty-one years of his life . . . the blank, the emptiness that was his image of himself before the bomber crash that had almost killed him. . . .

Zug . . .

Impulsively, he turned and took the path to the University library. There was a vacant information machine. He punched "General," and then spelled out Z-U-G.

The machine's transparency flashed, "SEARCHING," and then, after a second, "GEOGRAPHY (EUROPE)." On the central screen appeared a portion of a page of text. Naismith read, "Zug. (tsooK) 1. Canton, n. central Switzerland, area 92 square miles. Pop. 51,000. 2. Commune, its capital, on Lake of Zug S of Zurich; pop. 16,500."

Naismith turned off the machine in disgust. Of course, he was wasting his time. It was a little surprising that there should be such a word at all; but the girl had said "*a* zug," and besides, she hadn't pronounced it as if it were German. This couldn't be the answer.

As he was leaving the library, he

heard his name called. Plump Mr. Ramsdell, the bursar, came hurrying toward him along the graveled path between the flame trees, holding out a parcel wrapped in white paper. "How lucky to run into you like this," Ramsdell panted. "Someone left this at my office for you, and I absent-mindedly carried it out with me—" He laughed uncertainly. "I was just going to take it over and drop it at the Science Building, when I saw you."

Naismith took the parcel: it was unexpectedly heavy and hard inside the white paper. "Thanks," he said. "Who left it for me, anyone I know?"

Ramsdell shrugged. "Said his name was Churan. Short, swarthy fellow, very polite. But I really wasn't paying attention. Well, I must fly."

"Thanks again," Naismith called after him, but the little bursar did not seem to hear.

Funny that he should have carried the parcel out of his office, straight to the library—almost too pat for coincidence, as if he had known Naismith would be there; but that was impossible.

Funny, too, that anybody should leave a parcel for him with Ramsdell; he had nothing to do with the bursar's office, except to collect his pay checks.

Naismith weighed the parcel in his hands, curiously. He had an impulse to open it immediately, but decided not to—problem of

disposing of the wrappings, or else carrying them around. Besides, the thing in the parcel might be in more than one piece, awkward to carry unless wrapped. Better wait till he got it home.

But what could it be? A piece of apparatus? He had several things on order, but was not expecting any of them immediately, and anyhow, when they did come, they would be delivered in the usual way, not left for him at the bursar's office. . . .

Deep in thought, he walked to the tube entrance. He rode home with the thing on his knees, hard and metallically cool through the wrappings. There was no writing on the paper anywhere; it was neatly sealed with plastic tape.

The tube car sighed to a stop at the Beverly Hills station. Naismith went aboveground and walked the two blocks to his apartment.

When he opened the door, his visiphone was blinking red.

He put the parcel down and crossed the room with his heart suddenly hammering. He saw that the recorded-call telltale was lit, and touched the playback button.

A voice said urgently, "Naismith, this is Dr. Wells. Please call me as soon as you get in; I want to see you." The voice stopped; after a moment the mechanism clicked and the neutral machine voice added, "Two-thirty-five p.m." The playback stopped; the telltale winked off.

Wells was the head of the college psychiatric office; Naismith went to him as a patient every two weeks. Two thirty-five this afternoon—that was when Naismith had been in the middle of his temporal energy demonstration. He had a sense that things were happening all around him—first the girl with her disturbing question, and the dark man leaving a package for him at the bursar's office, and—

At the thought, Naismith turned and looked at the package on the table. At least he could find out about that, and without delay. With a certain grimness, he seized the package, put it on his desk, and with a bronze letter opener began to cut the tape.

The wrapping came away easily. Naismith saw the gleam of blued metal, then spread the papers apart, and caught his breath.

The machine was beautiful.

Box-shaped, with rounded edges and corners, all its lines flowed subtly and exactly into one another. On the top face there were oval inlays, arranged in a pattern that conveyed nothing to him, and slightly raised from the main shell. The metal was satiny and cool under his fingers. It looked machined, not stamped: fine, micrometrically exact work.

He turned it over, looking for a nameplate or a serial number stamped into the metal, but found nothing. There was no button,

dial, or any other obvious way of turning the machine on. He could not see any way of opening it, except by removing the inlays from the top.

Naismith felt cautiously at the inlays, trying to see if they would depress or turn, but without result. He paused, baffled. After a moment, his fingers began tracing around the outlines of the machine: it was beautiful workmanship, a pleasure just to touch it—and yet it seemed without function, useless, meaningless. . . .

Like the question: "What is a zug?"

Without warning, Naismith's heart began hammering again. He had an irrational feeling that he was being carefully hemmed in—trapped, for some unguessable purpose, and by persons unknown. His fingers left the machine, then gripped it fiercely again, pressing hard, twisting, trying to move some part of the mechanism.

He failed.

The visiphone blinked and *brrred*.

Naismith swore and hit the switch with his palm; the screen lighted up. It was Wells, with his iron-gray brush-cut and his deeply seamed face. "Naismith!" he said sharply. "I called before—did you get the message?"

"Yes—I just got in—I was about to vise you."

"I'm sorry, Naismith, but I'm afraid this had better not wait.

Come over to my private office."

"Now?"

"Please."

"All right, but what's it about?"

"I'll explain when you get here."

Wells' wide mouth closed firmly, and the screen went gray.

Wells' private office was a big, sunny room adjoining his home, with a view of the Santa Monica beach and the ocean. As the door slid open, Wells looked up from his desk, his big, leather-brown face serious and stern. "Naismith," he said without preamble, "I'm told you insulted and frightened a Mr. Churan today. What about it?"

Naismith continued walking toward the desk. He sat down in the conical chair facing Wells, and planted his hands on his knees. "In the first place," he said, "I'm not a criminal. Moderate your tone. In the second place, where do you get your information, and what makes you so positive it's correct?"

Wells blinked and leaned forward. "Didn't you burst in on an importer named Churan, over in Hollywood, and threaten to kill him?"

"No, categorically, I did not. What time was I supposed to have done this?"

"Around two o'clock. And you didn't threaten him, or break anything in his office?"

"I never even heard of your Mr. Churan until today," said Nais-

mith angrily. "What else does he say I did?"

Wells sat back, put a pipe in his mouth and looked at him meditatively. "Exactly where were you at two?"

"In my classrooms, giving a demonstration."

"What kind of a demonstration?"

"Temporal energy."

Wells picked up a gold pen in his big, well-kept fingers and made a note. "At two?"

"Certainly. My afternoon class has been at two since March, when the schedules were changed."

"That's right, I seem to remember now." Wells frowned uncertainly, pulling at his lower lip. "It's odd that Orville didn't seem to know that, although I suppose it might have slipped his mind . . . You know, Naismith, this could be a serious business. When Orville called me, around two-thirty, he was shaking all over." Orville was the head of the Physics Department, a nervous, white-haired man. "He'd just had a call from the police—this man Churan had complained to them, and naturally, he passed the buck to me. He knows I'm treating you for that amnesic condition of yours. Now, I'll put it on the line, Naismith—if you did black out and browbeat Churan, as he says you did, we've got to find out why."

Naismith began to stiffen with anger. "I've told you, I was in my

classroom at two o'clock. You can check on that, if you don't choose to believe me—ask my students."

Wells glanced at his notepad, scratched a couple of aimless lines, then looked up and said, "You used the word 'classrooms.' I take it that means you were teaching by multiple-class method."

"That's right. Almost all the undergraduate classes are multiples. You know how crowded we are."

"Surely. But what I'm getting at is this: at two o'clock you were in several places at once."

"Nine places, or rather ten," said Naismith. "It's the nine-unit duplicator in the East Wing of the Science Building."

"All right. My question is this: Is there any possibility that you were in eleven places at once, at two o'clock today?"

Naismith sat in silence, absorbing that. Then he said, "Offhand, the idea is ridiculous. You say this Churan's office is in Hollywood. The duplicator field has a range of only about five hundred feet."

"But would you say it's absolutely impossible?"

Naismith's wide jaw knotted. "I couldn't say that, of course. Impractical, at least, in the present state of the art. What are you suggesting, that I somehow gimmicked that Hivert Duplicator to project one of my doppelgangers into a stranger's office?"

"I'm not suggesting anything," Wells' pen made slow circles on

the notepad. "But Naismith, tell me this: why should this fellow Churan lie about it?"

"I don't know!" Naismith exploded. His hands clenched into powerful fists. "Wells, something's going on that I don't understand and don't like. I'm completely in the dark now, but I promise you—"

He was interrupted by the *brrr* of the phone. Without looking away from Naismith, Wells reached over and touched the button. "Yes?"

The first words swung his head around. "Wells! Now see what's happened!" It was Orville's shrill voice, and Naismith could see his white-haired head, grotesquely elongated in the visiphone. "He's dead—horribly burned to death! And Naismith was the last man seen with him! My God, Wells! Why don't you—"

"Naismith is here in my office now," Wells cut in. "Who's dead? What are you talking about?"

"I'm telling you, Ramsdell! Ramsdell! My God, look here!" Orville's paper-gray face withdrew, and after a moment the pickup tilted downward.

On the gray tile floor lay a plump body, sprawled like a hideously ruined doll. The head, chest and hands were nothing but shapeless masses of carbon.

"I'm sending the police!" Orville's voice shrilled. "Don't let him get away! Don't let him get away!"

CHAPTER TWO

WITH ORVILE'S HYSTERICAL voice still ringing in his ears, Naismith turned: in two quick strides he was at the door.

"What?" said Wells, slow to react. He half rose from his chair. "Naismith, wait—"

Naismith did not reply. He slid the door open, whipped through, slammed it again behind him and was running down the walk. Blood raced warm in his arteries; he felt no fear, only an intense and almost pleasurable anger.

In the instant before Orville finished speaking, the whole problem had become transparently simple. The police had no evidence against him in Ramsdell's death, and could not hold him; but they could, and would, delay him. And he was tigerishly convinced that his only safety now lay in striking back, as hard and as fast as he could.

At the foot of the hill, he caught a cruising municipal cab, and ordered the driver: "Hollywood. I'll give you the address on the way."

As the cab swung around and headed east on the Freeway, Naismith put a quarter into the phone slot and punched "Directory, Hollywood." The yellow transparency lighted up. Naismith punched "C-H-U-R-A-N."

The illuminated image jumped and blurred repeatedly; then it steadied on a page of fine print, slowly traveling past the scanner.

Naismith punched the "Hold" button. There it was: "M. Churan, Imprtr," and an address on Sunset Boulevard. Naismith glanced at his wristwatch: it was just four o'clock, and most California businessmen did not close their doors till four-thirty. There was still time.

"This is it, mister," said the driver, reaching over to turn off the meter. Naismith paid him and got out. The building was a yellow-stone monstrosity dating from the previous century. In the lobby, Churan's name was on the ancient white-letter directory. Naismith took the elevator to the fifth floor. The office, behind a corrugated glass door with Churan's name on it, was locked and silent.

Naismith rattled the door in a burst of anger. Raging, he banged the door back and forth in its half-inch of play, until the corridor rang with the sound.

The office next door opened and a pink young man stepped out, shirt-sleeved, with his necktie undone. "Here," he said. "Here, what's the gas with you, son? Don't go like that."

Naismith stared at him. The young man looked surprised, flinched, and stepped back into the shelter of his doorway. "Nothing personal, son," he added.

"Do you know Churan?" Naismith demanded.

"Sure, I know him, son—to say what ho. But he's gone, son—

gone—zipped out half an hour ago. I saw him leave.”

Naismith stared at the locked door. He had been quick, but not quick enough. With an impatient surge, he put the full force of his arm and wrist against the door-knob: with a sharp, ringing snap, the latch broke and the door swung in.

“Hey,” said the pink young man, his jaw open. “Hey now—”

Naismith strode into the reception room. There was nobody behind the desk, nobody in the inner office. Filing cabinets were standing open and empty; there was nothing in the desk drawers, nothing pinned to the wall. On one corner of the worn carpet, near the desk, there was a large, fresh ink-stain. There were some jagged pieces of glazed porcelain in the wastebasket, and a bedraggled bunch of yellow flowers.

Baffled, Naismith paused and sniffed the air. The office had an unmistakable atmosphere of vacancy; but to his sharpened senses there was a faint, jangling vibration in the room—yes, and a faint but distinct scent: something cold, musky and unpleasant.

When he left, the pink young man was still waiting in the corridor. Naismith said gently, “What do you know about Churan?”

“Well, son, I never spread the air with him. Just what ho in the morning, way I told you. But he’s a pro.”

“A what?”

“A professional, son. You know, show biz.” The pink young man pointed to his own open door, on which was lettered, “REGAL THEATRICAL ENTERPRISES.”

Naismith scowled. “Churan is an actor?”

“Got to be, son. He never got any parts through me, but I can tell. This importing piece must be a sideline. You looking for him real bad?”

“How can you tell he’s an actor?”

“The makeup, son. Every time I see him, he’s made up for the cameras. You might not notice, stereo makeup looks so natural, but I can tell. Every time I see him, he’s got it on. Who should I tell him was asking?”

“Never mind,” said Naismith, suddenly depressed. He turned without another word and went away.

In his own doorway, in the act of withdrawing the key from the lock, he paused and stood still, listening. A prickle of uneasiness ran over his body. There was a smell in the air, a sickly, charred, greasy smell. . . .

He went into the living room, through it to the bedroom. At first he saw nothing. Then, glancing at the floor behind the bed, he saw a woman’s foot and a thick ankle. The smell was overpoweringly strong.

Sickened, he went around the end of the bed. On the floor lay a body he at first could not recognize, although he knew who it must be. Mrs. Becker, who cleaned his apartment on Wednesdays—she was the only one other than himself who had a key. She was dead. Dead, and horribly burned. The face, chest, arms and hands were one shapeless, blackened ruin. . . .

Naismith went numbly to the telephone and vided the police.

They were there in less than ten minutes.

The cell door closed behind him with a sound of finality.

Naismith sank down on the narrow bunk, with his head in his hands. The police had interrogated him for three hours. They had been very thorough; their questions had ranged from his private life, to his previous history and service record, his amnesia—how they had hammered at that!—to his work at the university, the duplication process, temporal energy, everything. They had even suggested the fantastic idea that he might have alibied himself in both killings by traveling in time.

"Temporal energy isn't available on that scale," he had told them. "You don't realize what prodigious forces are involved. Even with the two thousand megakline Tau generator at the University, it takes several hours to charge

the ninety liters of water we use in the demonstration."

"But the water does move in time, doesn't it?" one of the detectives had demanded.

"Yes, but only a fraction of a microsecond, Lieutenant. The molecules are really only partly out of synch with our t. e. matrix. If there were a real displacement, they would simply vanish."

The detectives would not give up. Wasn't it possible to develop the temporal energy process to a point where a man could travel in time?"

"Possible, yes," he had told them angrily. "For someone thousands of years more advanced in science than we are. For us, now, it's a complete impossibility!"

Then they came back to Bursar Ramsdell. What grudge had he had against Ramsdell? "None! I scarcely knew him!"

Then it was just a coincidence, was it, that Ramsdell had been murdered horribly just after being seen with Naismith? "Yes!"

Guided by instinct, Naismith did not mention the parcel Ramsdell had given him. He could not explain the strength of the feeling to himself, but he was convinced that if he let the police take possession of the machine, a vital clue would be out of his hands.

Then his questioners turned to Churan, who had not appeared to identify Naismith, and could not be found. Had he murdered Chu-

ran, too, and hidden the body?

He patiently recounted what had happened at Churan's office, and named the pink young man as a witness.

Then what about the death of his housekeeper, Mrs. Becker—was that a coincidence, too?

Naismith grunted, clasping his head in his hands. How could it be coincidental that two people close to him had been killed in the same baffling way, within hours of each other? It was as if he were a sort of Typhoid Mary, an untouched carrier of disaster. . . .

An idea came to him, and Naismith sat up straight. Erect and still, he was concentrating furiously when the outer cell door opened with a clang.

Startled, Naismith looked up. The jailer in his sweaty blue uniform was entering. He walked to Naismith's door, fitted a key to the lock, swung the door open. "Okay, you can go," he grunted.

Naismith stood up warily. "I'm being released?"

"Your lawyer got you out on a writ. Come on, this way."

"My lawyer? But—" Naismith fell silent and followed the jailer. Wells, when they had allowed Naismith to see him an hour before, had told him he would get a lawyer, but not to expect anything tonight. "It's a first degree murder charge," the psychiatrist had said, "and they won't release you on bail, I know. But I'll have Howard

come down first thing in the morning. Be patient until then."

Had he lost track of time—was it morning already? No, the wall clock in the jailer's office read 9:05 p.m.

"Here's your stuff," the jailer said, tossing an envelope at him across the counter. "Sign for it."

Naismith scrawled his name, put the envelope in his pocket, and followed the jailer again. In the waiting room, a slender gray-haired man arose to meet them. He was dressed in a dinner jacket and carried a sleek pigskin briefcase.

"He's all yours," said the jailer, and walked away.

"Mr. Howard?" Naismith said, advancing with his hand out.

"Eh? No, no. Jerome is the name; how do you do." The gray-haired man shook Naismith's hand perfunctorily, then dropped it. He turned back his cuff to look at a wafer-thin wristwatch. "My heavens, it's late. I didn't realize—although I must say the writ didn't take long. Well, anyhow, you're out. I really shouldn't have come down at all." He paused, with a faintly bewildered expression on his pale face. "Shouldn't have come at all," he repeated.

They were descending the stone steps of the jail. Naismith said uneasily, "Did Wells arrange with you about your fee?"

"Wells?" the other man echoed, looking abstracted. "No, not Wells—I don't think I know him. You

know," he said, stopping again and facing Naismith, "it's incredible that I came out tonight at all. I can't understand it. Why, I was at a dinner party. Good heavens, my daughter is getting married tomorrow—" His face twitched. "Well, good night then," he said abruptly, and turned away.

"Wait," Naismith called after him. "If it wasn't Wells who asked you to help me, then who?"

Jerome did not pause. "Your friend Churan," he said testily over his shoulder. His footsteps dwindled down the echoing walk. Presently he was gone.

Naismith woke up, aware that he was not alone in the room.

He had reached home close to midnight, dog-tired, and had fallen almost immediately into an exhausted sleep. Now he was wide awake in the darkness, sitting up, every sense alert to a warning of danger that crawled invisibly in the room.

There was no sound of movement; but the darkness was electric with the presence of something powerful and menacing.

Then, slowly, like a mirage in the air, a faint bluish glow came to life in the middle of the room.

Naismith caught his breath; the blue glow was continuing to grow slowly brighter, until now he could make out the squat shape of something hanging in mid-air.

It was a shape like a fat piece of

tubing, bent downward to form an L. It was a gun, he saw now, as the light continued to grow: a pistol, clearly and unmistakably, although it was like no pistol that he had ever seen before. The thick handle was toward him, the barrel pointing away. Heavy and squat, the gun was a thing of subtle, powerful curves that melted into one another. Intuitively, he knew it was of the same family as the enigmatic machine Ramsdell had given him.

It hung there, unsupported, solid and real, and yet somehow spectral-looking in the blue light. It was bigger than any pistol made for a normal man's hand: Naismith could imagine himself getting out of bed, reaching out and taking the handle in his hand. And he knew that his grip would be barely big enough to hold it; his finger would barely reach far enough to press the trigger.

The silence was absolute. Naismith had forgotten to breathe.

The feeling of menace was still in the room, stronger than before, and it emanated partly from the weapon in the air, partly from the shadows beyond. The gun radiated a sense of brutal power: Naismith longed to touch it, and yet he was instinctively afraid of it—afraid of what ravening energies might be released if he touched the trigger. He knew, without any doubt or question, that the gun was no ordinary gun.

Then the darkness seemed to lift.

At the far side of the room, where his dresser and wardrobe should have been, Naismith saw a Something that stirred, with an impossibly fluid reptilian motion, and looked at him with tiny red eyes.

He was out of bed without knowing how he had left it, every muscle taut, the hair standing erect on his head.

The gun seemed to drift slightly closer.

The darkness lifted still more, and Naismith saw the hideous, insect-reptilian form of the Thing, heard its armored plates grate together as it moved.

A thin voice suddenly whispered: "*The Zug! The Zug! Kill it! Take the gun—kill it, quick!*"

Naismith moved faster than he had ever done in his remembered life. With one hand he swept up the wooden chair beside his bed, swung it hard and let go. The chair crashed full into the suspended gun.

There was a sound like silk ripping, and a blinding flare of blue light that undulated across the walls and was gone. Half-blinded, heart hammering in his chest, Naismith found the wall switch and lighted the room.

The gun was gone. The Thing was gone. The chair lay smashed and blackened in the middle of the floor.

CHAPTER THREE

1. The Zug. [Twice underlined.]

2. Miss Lall. (?)

3. Things burned—Ramsdell, Mrs. Becker, the chair.

4. Churan. (?)

5. Ramsdell's machine, similar to gun.

6. Why did Churan accuse me, then get me out of jail?

7. Why???

Naismith stared at the list he had written. A pattern was forming in it, but it was maddeningly obscure. He rose from his desk and took a turn around the living room, moving nervously, combing his hair back with an impatient gesture. It was mid-morning: he had finally fallen asleep again toward dawn, and had slept until nearly ten.

He sat down at the desk again, staring at the list with narrowed eyes. The pattern . . . He drew a light pencil line between Miss Lall's name and Churan's. The two of them, evidently connected, similar in origin . . . one East Indian, the other, by the sound of the name, probably Iranian. . . . He felt a touch of uneasiness at this thought, but could not identify it, and went on. He remembered now that Miss Lall always sat alone in class; the other East Indian students invariably sat in close, gossiping groups. Did she avoid them because they would

know she was not Indian, in spite of her name?

Why did Churan wear actor's makeup?

Why, why, why. . . ?

The pencil snapped between his fingers. Naismith sat back, deep in thought. He had done the one right thing last night, he knew intuitively, in hurling the chair at the spectral gun. Immediately afterward he had felt an overpowering sense of relief, almost of reprieve. But why? What would have happened if he had touched the gun?

He thought of the blackened chair, and shuddered. But he knew, somehow, that was not the answer.

He checked off the points on the list again, one by one. After a moment, hesitantly, he drew a doubtful line between "Things burned" and "Ramsdell's machine."

Now the thought that had come to him last night in the jail cell began to take shape. Ramsdell had died after handing him the machine from Churan. Mrs. Becker had died after moving the machine from the desk to the closet. A common denominator: both had held it in their hands.

Naismith got up and went to the closet. The machine gleamed dully at him from the shelf. Reluctantly, he reached up and pulled it down. It lay heavy and solid in his hands; it was just heavy enough that to hold it comfortably, an or-

dinary person would have to keep it at the level of his chest.

That was what Ramsdell and Mrs. Becker must have done. And they had been burned in the chest, face and arms—that is, in a radius of about a foot and a half from the point where they had held the machine.

If he was right, he had in his hands a thing of frightful power.

And yet he had held the machine, not once but several times, just as he was doing now.

Slowly he put the machine back on the closet shelf. He returned to the desk, leaning over it and staring intently at the list.

The gun—similar in appearance to the first machine, and evidently wielding the same terrible power. He picked up the pencil, drew another line between the gun and the machine. Then he traced it again, making it heavier. *The gun had appeared after he brought the machine into the apartment.* There was one more connection: if he could trace them all, he would have the answer to the mystery.

He frowned at the last items, the questions of motive, then left them and went back to the head of the list.

The Zug. The word had a teeth-grating unpleasantness for him now, remembering the shadowy creature he had seen in his bedroom last night. What was it? He had no more knowledge than be-

fore: but he knew in his viscera that it was real.

Miss Lall. There at least was a place to start. It was she who had begun the whole thing, with that abrupt question: "What is a Zug?" Her voice . . . was it similar to the one that had whispered to him out of emptiness last night? He could not remember: but he felt certain that Miss Lall knew more about what a Zug was than he did.

She had not asked because she wanted to know.

Why then? To start him thinking, to create a state of mind in which other things might happen. . . ? Naismith's fingers tightened on the broken stub of pencil. Yes, he wanted very much to meet Miss Lall again.

He thought briefly of taking the machine with him to the university laboratories, then dismissed the idea. It was too dangerous; he couldn't take the chance of injuring any more innocent people. Actually the thing ought to be in a vault by itself somewhere . . . but barring that, it was as safe here as anywhere. He locked the door carefully behind him.

Youngsters were strolling on the shadowed campus lawns, oblivious as he went past them. Naismith called first at the Registrar's office. "Dolly," he said to the brown-haired woman at the desk, "can you tell me something about a freshman named Lall—Samarantha Lall?"

The assistant registrar looked up, startled. "Oh—Professor Naismith." She hesitated. "But, Professor, aren't you suspended? Professor Orville said—" She stopped, embarrassed.

"It was all a terrible mistake, Dolly," Naismith told her in a confidential tone. "I had nothing to do with Ramsdell's death. They asked me a few questions and then released me. You can call up the police and verify that, if you like."

"Oh, no," she said, still looking doubtful. "Well, I'm sure it's all right, then. What was it you wanted to know?"

"Miss Lall. Does she have any classes this morning, and if so, where would she be now?"

The woman turned to her card file, and after a moment answered, "She's in Professor Strangland's English class this morning." She glanced at the wall clock. "If you want her, better hurry—that class is just letting out."

Naismith thanked her hastily and left. He knew she would notify Orville and there would be trouble—perhaps an expulsion. But he had no time for that now.

He saw her among a group of students scattering out of the main entrance of the Humanities building. She stood composed and erect, in a dark blouse of figured silk and a short white skirt, with her books and equipment in her arms, waiting for him while he walked toward her.

Now that he observed her closely, she was an unusual looking girl. Her skin was a dull tan color, without gloss, even over her prominent cheekbones. Her hair was black and dull. Her rather heavy features remained expressionless as he approached, but her long, amber eyes regarded him with veiled amusement.

"Yes, Professor?" she said in her thin voice.

"Miss Lall." He was fighting to control a sudden anger that made his hands tremble.

"Yes?" she repeated.

"What is a Zug?"

They stared at each other for a moment in silence. "So you still don't remember" she said. "A Zug—" she pronounced the word with an intonation of hatred and disgust—"is a mutated ortholidan."

"That means nothing to me."

"An ortholidan is a monster. Some grow thirty feet long. They are flesh-eaters, very fierce, and the mutated ones are also very intelligent."

"What species do they belong to? Where are they found?"

"They belong to no Terrestrial species. As to where they are found—" she hesitated—"I can't tell you that yet."

"Why not?"

"You aren't ready. We thought you were but we were mistaken."

"Ready for what? What do you want of me?"

She said slowly, "I'm going to be frank. We want you to kill a Zug. The Zug is in a certain place, very hard to get to. When you are ready, we'll take you there, then when you have killed it, we will reward you liberally." She smiled, showing small, separated white teeth.

Oddly repelled, Naismith said, "Then all this has been just to drive me into a position where I'd have to do what you wanted?"

"Yes." She smiled again, and again Naismith felt a wave of repulsion.

"But why me?"

"Because you're a Shefth. Look —" She fumbled in her handbag. "Catch this." Her hand came up; something small and white hurtled toward him.

Naismith's left hand went out, caught the thing in midair, batted it violently away. It bounced on the grass and came to rest.

"You see?" she asked, a little shakily, staring at him with her luminous amber eyes. "That's why. Your reflexes are twice as fast as any—normal human being's." She stopped. "But I've said enough. Just one more word, Professor Naismith. Struggle against us. The more you struggle, the more ready you'll be. Now good-by."

She turned away. Taut with anger, Naismith stepped after her, took her by the arm.

Her bare flesh burned cold into his palm. She was as cold as a lizard—or a corpse.

Naismith let go hastily. Her amber eyes stared coldly into his as she said again, "Good-by, Professor Naismith." Then she turned, and this time Naismith did not try to stop her. He watched until she disappeared around a curve of the flame-tree-bordered path.

After a moment his eye was caught by a glint of white on the lawn a few yards away. He went to it, stooped and picked it up. It was the object Miss Lall had tossed at him: a chrome tube like an oversized lipstick. He removed the cap gingerly: there was a brown substance inside, the end apparently worn by use. On his thumb, it left a brown smear, which would not come off, although he rubbed it vigorously with his handkerchief.

Turning the tube around, he saw lettering stamped into its side: "WESTMORE CHARACTER SKINTONE No. 3: DARK SUNTAN."

Naismith went home in a mood of suppressed fury. He pulled the machine down from the closet shelf again, set it on his kitchenette table, and stared at it while he ate a sandwich and drank coffee. The food satisfied his hunger, but his attention was not on it. He looked at the sleek, gleaming metal case as if by sheer force of staring he could penetrate its secrets. The metal was blue, like blued steel but with iridescent glints of color. When he looked closely, he could

just make out the fine parallel lines of the machining. That was what gave it the iridescence, apparently. He examined the three oval inlays, tried again to turn or depress them, tried to force his fingernail into the cracks around them, but the separation was too fine. He turned the machine over, looking again for any join, but there was none: except for the three inlays, the case was all one piece.

A prickle of uneasiness went up his spine. A machine is incomplete without controls. This had none. Therefore it was incomplete: *the controls were elsewhere.*

Someone, out there, invisible . . . sitting in a room, watching Naismith every moment . . . with his finger on a button?

Naismith's fists clenched. The thing was dangerous, lethal; the fact that it came from Churan was proof enough that it was meant to work against him. And yet it was the only solid piece of evidence he had.

What else was there? He cast his mind back over the conversation with Miss Lall: all of it seemed subtly unpleasant now. Like an electric current, that cold touch of her arm had run back over all his memories of her.

After a moment he got up and took his notepad from the desk. Sitting again at the kitchenette table, he turned to the page where he had already listed what he knew about Lall and Churan, and wrote

underneath: "Shefth. Mutateortholidan. Not Terrestrial species."

Under that again, he scrawled, "Am I?" And immediately crossed it out with two heavy black lines.

He stood up, paced back and forth twice across the small room, then went with sudden decision to the visiphone and punched a number. To the university switchboard operator who answered, he said, "Professor Sturges, please."

"I'll see if he's available." The screen went gray, then blinked to life again. A pale young man peered myopically out of the screen. "Bio office."

"I'd like to talk to Professor Sturges, please."

"Okay, I'll get him." He disappeared from the screen, and Naismith heard his distant voice calling, "Hey, Harry—run down and tell Prof Sturges there's a visi for him."

After another wait, Sturges' cropped gray head and sallow, intelligent face came on the screen. Sturges held the Chair of Xenology; he was a quiet man, said to be well thought of in his field, Naismith had only met him once or twice, at faculty luncheons.

"Sturges, I need some information in your line, if you will."

"Of course, but aren't you—" Sturges blinked at him with faint suspicion.

"It's all been cleared up. I'll explain when I see you," said Naismith quickly. "Meanwhile, what I

chiefly want to know is this: according to my understanding, no intelligent humanoid race has ever been discovered off Earth. Is that correct?"

"Quite correct," Sturges replied, still with reserve. "In fact, no intelligent race at all. One or two are about as smart as a chimpanzee, according to the Europeans. Why?"

"A student of mine asked me to criticize an imaginative story of his," Naismith said, improvising. "Now this may be a little harder. Does the word 'Shefth' mean anything to you?"

Sturges repeated it without interest, then shook his head slowly. "No."

"Zug?"

"No."

"Have you ever heard of an organism called an ortholidan?"

"Never," said Sturges succinctly. "Is that all?"

Naismith hesitated. "Yes, that's it. Thank you."

"Any time," said Sturges distantly, and broke the connection.

Naismith sat looking at the blank screen. He had been on the point of asking Sturges, "Could a living human being be as cold to the touch as a lizard?"

But he knew the answer. Reptiles and amphibia are cold to the touch because they have no self-regulating temperature mechanism. The temperature of warm-blooded animals varies between narrow limits; if it rises or falls be-

yond those limits, generally speaking, the animal dies.

But a cold-blooded animal's body temperature is always within a degree or two of the temperature of the air. And it had been cool and overcast this morning on the campus. when he met the Lall creature. . . .

Naismith stood up, his muscles murderously taut. These people, whatever they were, knew more about him than he did himself. And that was intolerable.

"A Shefth," he said aloud. The word still meant nothing to him, called up no image.

Where had he been, what unimaginable things had he done, during the thirty-one years that were blank in his memory?

Where on Earth . . . or off it?

Naismith thought frozenly, "Everything depends on what action I take at this moment." With every nerve alert, he could sense the gathering danger around him as if it were a visible, geometric web.

With sudden decision, he turned to the visiphone again, punched a number.

The screen lighted; Dr. Wells' brown, seamed face looked up pleasantly. "Oh, hello, Naismith. Is anything the matter?"

"Wells," said Naismith tensely, "you told me once there was a crash method we could employ to break my amnesia, if everything else failed."

"Well, yes, but we're not down

to that yet, man. Be patient, give the routine methods a chance to work. Now, your next appointment—" He reached for his calendar.

"I can't wait," Naismith told him levelly. "How dangerous is this method, and what does it involve?"

Wells put his muscular hands together under his chin. "It's dangerous enough. Some people have been driven into psychosis by it—it's nothing to fool with, I assure you. Essentially, what it amounts to is a psychic leverage to bring up the material the patient's mind is holding back. Sometimes, when it does come up, it shocks him so that he goes off into a psychotic state. There are good reasons for loss of memory sometimes, Naismith."

"I'll take the chance," Naismith said. "When are you free?"

"Well now, hold on a minute—I haven't said I'd take the chance. Really, Naismith, my advice to you is to wait—"

"If you won't do it, I'll find another psychiatrist who will."

Wells looked unhappy. "In this town, that wouldn't be impossible. Come over, Naismith, and we'll discuss it anyhow."

Wells finished arranging the head clamps and stepped back, glancing at the meters on the control unit beside the couch. "All right?" he asked.

"Get on with it."

Wells' brown fingers hesitated

on the knob. "You're sure it's what you want?"

"I told you my reasons," Naismith said impatiently. "Come on, let's get started."

Wells turned the knob; the machine clicked on, and a low hum was audible. Naismith felt a curious tickling sensation in his skull, and resisted an impulse to reach up and tear off the head-clamps.

"In previous sessions," Wells said, "we've taken you back through your hospital days, covered that fairly well, and your college experiences after you got out. Now let's see if we can bring up a little sharper detail from one of those memories." He turned a dial; the tickling sensation grew stronger.

"I direct your attention to your first day in the Air Force Medical Center," said Wells. "Try to recapture the image of your first waking recollection. The first thing you remember, on waking up. . . ."

Naismith tried to concentrate. He had a vague recollection of whiteness—white sheets, white uniforms. . . .

Watching him, Wells did something at the control unit. Instantly a vivid scene leaped up in Naismith's mind, so clear and detailed that it was almost like living it over again.

"Yes?" said Wells alertly. "Describe what you see and hear."

Naismith clenched his fist involuntarily, then tried to relax. "Young doctor just came into my

room. I can see his face as clearly as yours. About thirty, heavy cheeks, cheerful-looking, but his eyes are shrewd. Looked at my chart, then at me. 'How are we feeling today?' Nurse glanced at me and smiled, then went out. Big, pleasant room—green walls, white curtains. I said, 'Where am I?' Naismith paused, frowning in surprise. "I didn't remember anything . . . not anything. Not even the language—he—" Naismith twisted suddenly on the couch.

"Easy," said Wells. "Can you tell me his reply?"

Naismith clenched his jaw. "I can *now*. He said, 'What language is that, old fellow?' But I didn't understand it!" Naismith rose to one elbow. "He was talking English, and I didn't understand a word!"

Wells pressed him back, looking worried. "Easy," he repeated. "We knew you were totally amnesic after the crash. You had to relearn everything."

"*But what language was I speaking?*" Naismith demanded ferociously. "When I asked him 'Where am I?'"

Wells looked startled. "Can you repeat the actual sounds?"

"*Glenu ash i?*" said Naismith after a moment, with closed eyes. Tension was mounting in him; he could not lie still. His jaw muscles were painfully tight, and he could feel his forehead beginning to sweat. "Do you recognize it?"

"I'm no linguist. It isn't German, or French or Spanish, I'm quite sure. But perhaps Rumanian, or Croatian, something from that general area? Is there any influence of that kind in your background?"

"Not according to the records," Naismith said tensely. Sweat was streaming down his face; his fists clenched and opened, clenched again. "My parents were both native-born and lived in the Midwest all their lives. Both died in the Omaha dusting, and so did all my other relatives; I was the last one. And I nearly bought it."

"Let's pass on," said Wells. "After this is over, I'll play that phrase back to Hupka or Leary, and see what they say. Let's try a little farther back now. Try to compose yourself."

"All right." Naismith straightened out on the couch, arms at his sides.

"I direct your attention now," said Wells carefully, in a strained voice, "to your last memory *before* waking up in the hospital. The last thing you remember." He touched the controls again.

Naismith started, as another of those vivid images exploded in his mind. A landscape this time, misty and gray.

"The crash," he said hoarsely, and licked his lips. "Wreckage all the hell over—smoking. . . . Bodies—

"Where are you?" Wells asked.

"About twenty yards from the fuselage," Naismith said, with an effort. "Buck naked, bleeding. . . . It's cold. Bare ground. There's a body, and I'm bending over to see who it is. No face, all smashed. Dog-tags. . . . Good Christ!" He sat up abruptly, trembling.

Wells went pale under his tan and switched off the machine. "What was it?"

"I don't know," Naismith said slowly, fumbling in his mind for the image that was no longer there. I was reaching for the guy's dog-tags, and then—I don't know what. A hell of a shock. Now it's gone."

"We'd better call this a session," said Wells, about to disconnect the control unit. "Next time—"

"No!" Naismith seized his arm. "We're close to it now, I can feel it. I'm not going to quit. Turn that thing on."

"I don't think it's wise, Naismith," said Wells soothingly. "You're reacting too strongly; this is powerful stuff, don't forget."

"One more try," said Naismith. "I can take one more, then we'll pass it till next time." He held Wells' eyes with his.

"All right, then," said Wells reluctantly. "Let's see. . . ."

Naismith lay back. The hum and the tickling in his skull began again. "I direct your attention," said Wells, "to your childhood. Any scene from your childhood. Anything that comes to mind."

Naismith went rigid. Something swam up toward his consciousness, something so dreadful that if he saw it, he would go mad. Then it was gone.

So it had been a flop. Angrily, as he stood on the path outside Wells' home, Naismith massaged his temples with his fingers. All he had got out of the whole thing was a headache.

He stood in angry indecision for a moment, then started off down the path toward the tube entrance. There was something he had been meaning to do at the University; he might as well do it while he still had some freedom of movement there.

The headache got no better and no worse. It felt as though the clamps Wells had put on his head were still there, and although it was senseless, he could not get rid of the impulse to brush them away.

Going to Wells had been a mistake. All the discomfort, the paraphernalia, the time wasted, and still they had got absolutely nothing from the blank period that ended four years ago. Some few bits of memory from his time in the hospital after the crash—more than they had got previously—then nothing at all.

He got off at the University stop, walked to the Science building in bright sunlight. A few students he passed stopped and looked after him; but he met no one he

knew well, and no one spoke to him.

As he climbed the rear stairs to the classrooms, he met jittery Donald Klemperer coming down, followed by a young preparator named Irving; both were wearing lab smocks, and looked startled to see him. Klemperer was the youngest member of the physics department, an anxious, blinking youngster. Irving was dark, heavy and placid.

"Oh, uh, Professor Naismith," Klemperer stammered. "Professor Orville said—"

"Have you been taking over my classes?" Naismith asked pleasantly, continuing to climb the stairs past them.

"Yes, yes I am, but what I wanted to say—"

"How did the demonstration go today?" Naismith was at the head of the stairs, turning his head to look back. Klemperer and Irving, craning up, both had their mouths open.

"All right, ah, pretty well, but —"

"That's good, keep it up." Naismith started briskly down the hall.

"But Professor Orville said if I saw you, I was to be sure and get your *key*!" Klemperer wailed.

Naismith did not answer. He unlocked the door of the duplicator room, slipped inside, slammed it behind him. Reacting to his presence, the lights slowly glowed on.

He looked around the room, examining the familiar equipment as if he had never seen it before. The duplicator mechanism, in three metal cases grouped against one wall, and in the two units above and below the object platform, was a standard nine-gang Hivert Duplicator outfit. It had an object field six feet in radius, here marked off by a low railing. The table and apparatus were set up much as he had left them yesterday: one tank, the tau accumulator, the release mechanism, now pushed to one side. Several items had been added: a photometer and interferometer, a small theodolite, some prisms, the usual equipment for demonstrating the optical properties of quasi-matter. In addition, the heavy base-plate of a hydraulic jack had been bolted to the floor, and a small traveling crane had been positioned to take the weight of the tank when the table was removed.

Naismith recognized the preparations for the third in the series of quasi-matter demonstrations; Klemperer and Irving must have been setting them up just before he arrived.

He glanced thoughtfully at the tank itself. The liquid inside, still in the quasi-matter state, reflected light like a tankful of mercury. The reflections of the walls, the door and the equipment around the room were distorted by the tank's curvature, and by something

else. From where he stood, Naismith could clearly see the image of the duplicator machinery on the wall to his left, whereas his own reflection was a barely visible stripe at the right rim of the tank.

What he wanted to know, fantastic as the idea still seemed, was whether it was remotely possible that the Hivert apparatus had somehow duplicated him ten times instead of nine, and projected the additional doppelganger into Churan's Hollywood office. If that had actually happened, it would change the whole complexion of events. He did not believe it, but he wanted to be certain.

With some difficulty, he got the front panels off all three units of the control mechanism, and examined the massed tubes and wiring inside. He was not an expert on the Hivert, but was generally familiar with its design, and as far as he could tell, there were no signs of anything unusual. The units in floor and ceiling were less readily accessible, but both were thick with dust and grime: obviously they had not been opened for months.

His ears caught a faint click, and he turned in time to see the door swing open.

In the doorway stood two broad men in maroon jackets. Light glinted from the guns in their hands. "Hold it!" said one sharply.

Caught off balance, with no time to think, Naismith instinctively slammed one hand down

onto the light button on the control pedestal. He pivoted in the same motion and kept going, while the room lights winked out and the room darkened, except for the broken shaft of illumination from the doorway.

Someone shouted. Naismith was moving fast, swinging around the corner of the table. There was a deafening roar as one of the guns went off; then Naismith was crouching, sheltered by the tank. Only two or three seconds had gone by.

In the ringing silence, one of the men called thinly, "Come out of there, Naismith! You can't make it—there's only one door!"

By the flickering of the light from the doorway, Naismith could tell that both men had come farther into the room, moving apart, one to each side. Poised and alert, his heart thudding steadily, Naismith was able to think with cold precision: *The tank rotates momentum 90° counter-clockwise.*

Both hands went quickly to the tabletop. One closed on the heavy brass theodolite, the other snatched up two of the prisms.

In his mind he was keeping track of the two men's positions, diagramming them like an elementary problem in trigonometry. He waited until the last instant, then sprang up and threw the prisms at the man on his right.

The room roared again, with a volume of sound that made the

walls shiver and hurt his eardrums. The glass tank dissolved into a hundred fragments, but the silvery cylinder of quasi-matter stood unchanged. As he ducked down behind the tank, Naismith heard the shots continue: three, four.

. . .

There was a faint clatter and a thump from the other side of the room, to his left.

Naismith risked a look: the man on his left was kneeling, arms crossed tightly over his stomach, head forward. His gun was on the floor. The man swayed and began to topple.

Naismith gathered himself, swung the heavy theodolite over the table with all his force, and instantly followed it, vaulting the table. The second man was down, off balance, having ducked to avoid the missile. He snapped one shot at Naismith, filling the room with sound: then Naismith was on top of him. Naismith felt a brief shock in one hand, and the man was sprawling limply under him, his neck unnaturally bent.

Naismith was up again almost without a pause, running out the door, past the white faces of Klemperer and Orville; then down the stairs, out into the sunshine. He discovered that he was bleeding freely from a cut on one cheek, probably where one of the slivers of glass had struck him.

Realizing abruptly how fast he had been moving, he forced him-

self to walk at a normal pace across the lawns toward the tube entrance. A few students were gathered around a gray and blue copter parked on the lawn: the bubble was empty, the blades still. On impulse, Naismith went that way. A prickle of uneasiness went up his spine as he walked. It had been too quick: he had not had time to do more than act instinctively. There had been a threat to his life; he had met it with the means at hand, making one of his attackers shoot the other, by deflection from the kinetically inert quasi-matter. If he had thought at all, he had assumed the two men were gunsters hired by Lall and Churan. But . . .

He was at the copter, ignoring the students who turned to stare. Inside the bubble, a radio voice was muttering indistinguishably. Naismith opened the door, stepped up and leaned his head in to listen.

The uniformed patrolman in the tiny visiscreen was saying: ". . . detention and interrogation. This man is wanted for the murder of Dr. Claude R. Wells, a psychiatrist at the University of California in Los Angeles. Wells was battered to death, and his office completely wrecked an hour ago. Naismith is considered extremely dangerous. He is not known to be armed, but is to be approached with caution. His description again, W.M.A., six feet two inches . . ."

The last words barely registered. Naismith turned away, with a roaring of doom in his head. When they saw his face, the students looked alarmed and backed off. He went through them, past them, moving like a somnambulist.

He could not even reject what he had heard in disbelief. He had realized instantly at the first words from the copter radio, that he had no memory of Wells at all beyond that frightening unseen thing that had come up out of his childhood. After that, a blank.

"Struggle against us," the Lall creature had said. And he had done it; and this was the crushing result. He had killed Wells and two detectives. Now he was "ready"; he had nowhere left to go, except to Lall and Churan.

Behind him a weak, distant voice was calling. "Hey . . ." came faintly over the lawns. "Hey, stop him! Stop him! Hey . . ."

Naismith glanced back, saw two doll-figures emerging from the Science building. One had white hair, and he identified it instantly as Orville. Both were running, waving their arms.

The students around Naismith turned their heads indecisively from the two figures to Naismith. Like most people, they were slow to react. Naismith turned his back on them, careful not to move too quickly, and started to walk away.

At the last moment, a husky senior blocked his path. As he

opened his mouth to speak, Naismith straight-armed him and began to run. His last glimpse of the senior showed him on one leg, windmilling his arms for balance, his mouth all amazement.

Naismith sprinted. He had taken four strides when the sound he dreaded broke out behind him: a chorus of yells from many young throats; the sound of a mob in pursuit.

As he ran at full speed toward the tube entrance, a second police copter was sidling down out of the sky.

CHAPTER FOUR

WITH THE SOUND OF THE MOB in his ears, Naismith ducked into the tube entrance and went down the stairs three at a time. He had one chance in a thousand. If there could be a train just pulling out—

The station was empty.

He saw that in one instant. In the next, at the edge of his vision, he saw a door open. He whirled. It was the door to a maintenance room; as it swung open, he saw it was blank except for ventilation louvers, and a number painted in white.

Inside the room, dark in a shimmer of faint colors, stood Miss Lall with a bearded stranger behind her. She held out her hand. "Come in!"

He sprang toward the doorway, aware as he did so that there was something abnormal about the walls of the room. They were curved and insubstantial, with a soap-bubble shimmer about them; they were partly transparent. Beyond them, he could dimly make out the real walls of the room, with clothing hanging on hooks, a mop leaning against one corner.

Then he was inside. Lall sidled past him and closed the door. The bearded man remained seated. The three of them looked at each other. They were enclosed and huddled together by an oval shell of transparent, streaming color. The light was strange; it was like being inside an egg made of rushing shadows.

Outside, an instant later, the rattle of footsteps and a frantic baying of voices poured down the stairs, onto the platform.

Naismith took a deep breath, let it go, relaxed deliberately with his hands at his sides. "All according to plan?" he asked ironically.

"According to plan, Mr. Naismith," said the bearded man. He was seated on a stool which appeared to be part of the substance of the shadow-egg. The dancing prismatic colors streamed out from the base of this stool and disappeared at the apex of the shell.

The bearded man was swarthy and blunt-featured, with long amber eyes. His skin was hairless except for the incongruous pointed

black beard. His stubby, short-fingered hands lay casually upon the blued-steel object in his lap. With a shock, Naismith recognized the machine that he had left in the closet of his Beverly Hills apartment.

"You sent me that thing," he said abruptly. "Then you must be Churan." His fists clenched.

The bearded man's eyes flickered. "We have saved your life, Mr. Naismith," he said hoarsely.

"All right, let's say you did. You must have done it for some reason. Here I am. Just what is it that you want?"

Miss Lall, her eyes shining, said something swift and emphatic in a language unfamiliar to Naismith, a curious combination of liquids and deep gutturals. The bearded man nodded, wet his lips nervously. "We want you to come with us," he said. "A long journey, Mr. Naismith—twenty thousand years. Does that interest you?"

"What if I say no?"

Churan's amber eyes glinted briefly. "We want you to come willingly, Mr. Naismith."

Naismith gave a mirthless bark of laughter. "Is that why you killed Ramsdell and Mrs. Becker?"

The woman bent toward him slightly. "I'm not sure you understand, Mr. Naismith. The machine killed Mr. Ramsdell and Mrs. Becker. It is tuned to our mind patterns—yours, his and mine. You see, for anyone else, it is not

safe to touch. A precaution against theft."

Naismith felt his anger growing in spite of himself. "Are you saying that two people died just for nothing—just because you wanted to get that machine into my hands?"

"No, on the contrary," said Churan. "Sending the machine to you was merely a device to kill Mr. Ramsdell, so that you would be suspected of murder. Our aim was to weaken your associations here. You were too well convinced that you were really Gordon Naismith."

Naismith absorbed that in silence for a moment. Finally he said, "You've made several of these cryptic little references to my origins. You claim to know all about me—more than I know myself. All right, who am I?"

"That you will learn when we get to our destination, Mr. Naismith," answered the woman. "You must come," she added; "otherwise you will never know. Not even if you kill us. Especially if you kill us."

Outside, the noise of the crowd was dwindling; Naismith could hear isolated querulous voices calling from one end of the platform to the other. From time to time, someone would approach the maintenance room, try the knob, find it locked, and go away again.

He made his decision. "All right, I'm ready. Let's go."

Lall and Churan exchanged a quick glance. Then the man's stub-

by fingers moved on the surface of the machine.

Naismith watched in fascination as the inlays, which had resisted all his efforts, depressed and moved under Churan's fingertips. As they did so, although there was no sense of motion, the walls of the maintenance room, hanging garments, mop and all, gently receded. In the fact of turning, Naismith felt a psychic shock as the closed, shadowy door drifted through his own body.

Then they were moving across the station, a foot or two higher than the young men who stood in postures of arrested motion, scattered here and there about the platform. There was no sound. Every form was still, although some were caught in mid-stride. Faces were contorted, eyes glared blindly.

Moving at the same even pace, they drifted into the wall of the station. Another moment of darkness, then they emerged, on a shallow upward slant, into the open air.

Naismith watched everything with intense concentration, trying to fathom the relationship between their movements and Churan's handling of the machine.

"What I fail to understand," he said abruptly, "is how the energies you are using can be contained in so small a space."

"They are not, Mr. Naismith," said Lall with a look of respect. "The forces we use are generated

in the future. This machine that you see is only the control unit. We call it—" She uttered two throaty monosyllables. "In English, what would it be?" She paused, and said doubtfully, "Time sphere? No, because it is not a sphere. But the name means something that is lowered in time, as you lower a bathysphere in the ocean. How would you say—you ought to know this, Mr. Naismith—a temporo- . . . ?"

Outside, the bright campus was like a color transparency: the two copters, the students on the lawn, all were caught in one frozen moment. Naismith stared in fascination as the shadow-egg drifted, now more rapidly, eastward across the lawns. Buildings, flame trees and people receded in perspective—not like a photograph now, but like some incredibly detailed and lifelike miniature model.

"Temporoscaphe?" he suggested wryly, after a moment.

"Good, temporoscaphe. But it is a very ugly word. . . . You see, we can control our position in both space and time. Just now, we move in space while remaining fixed in time. Later on, the other way around."

Below, the landscape was now flowing back more rapidly. Sunlight glinted yellow off the tip of some building on the northern horizon. Rising on a long slant, they were now passing over Burwash Park. Naismith could see the

gravel walks, the pedestrians frozen in place like bright-colored dolls, the silvery lake and the handball courts. It flowed away and was gone; the densely packed buildings of metropolitan Los Angeles swam into view, all in the same unearthly silence.

Standing there in the confined space of the shadow-egg, Naismith was abruptly aware of something that had been at the edge of his consciousness: the smell. It was cheap perfume, with an undertone, almost masked, that he recognized: the same cold, musky odor that he had smelled in Churan's office. Looking at the two of them now with renewed attention, he realized how quite astoundingly ugly they were when seen together. What might have been an accidental cast of features in Lall—the flat, wide-nostriled nose, the long amber eyes, the thin mouth—became, in this doubled image, the pure stuff of ugliness. They were like two painted frogs, there in the shadow-egg, both staring at him with unwinking amber eyes—frogs, obscenely vivisected to stand erect and wear human clothing. And remembering the cold touch of Lall, Naismith shivered.

The foothills were sliding away beneath them now, yellow-brown and bare in the sunlight, then the mountains rose slowly into view. Naismith glimpsed sunlight winking from the windows of a canyon-perched house, tiny with distance.

As they crossed the mountains, still gaining altitude, he could see the whole circle of the horizon, misty blue, with flecks of cirrus floating high in the pale vault. Something else caught his eye, a bright glint above the clouds, rapidly coming nearer. Now he could almost make it out; now it grew plain—a blue and silver Trans Am airliner. They were going to pass it almost on the same level. As it swelled nearer, brilliant and solid in the sunlight, Naismith flinched involuntarily; he could see every rivet in its polished skin. He could see, too, that it was hanging absolutely motionless in the air, as if embedded in gelatin. Behind the windshield, the pilot and copilot were stiff wax dummies; faint spears of flame were frozen in the jets. It whipped past and dwindled behind them, still hanging immovable.

The two aliens were watching him with intent, unreadable expressions. Naismith's lips were dry. He said, more harshly than he had intended, "Where are we going?"

"Not so far now, Mr. Naismith," said Churan. Below, the round world was rolling back at an incredible speed; there was a glint of silver that Naismith recognized as Boulder Dam; then the mighty scar of the Grand Canyon, filled with shadow, passed beneath. Then there were more mountains, and a threadlike river that must be the Colorado. Down on the plain

beyond the mountains, Naismith caught sight of a city sprawled like a scattering of silver dominoes. It glittered in the parched land. "Denver," he said.

"Not the city itself," said Churan, glancing down at the machine in his lap. "We use it for a landmark." Now his pudgy brown fingers were dancing over the machine, and Naismith saw the odd-shaped inlays depress one after another, glimpsed a shimmer of light that floated briefly over the machine. Then there was a spot of angry red light that pulsed slowly and regularly; then more rapidly as they crossed the city, slowing now, then more rapidly still as the shadow-egg drifted to a stop; and after a moment the red light shone steadily, with the faintest suggestion of a shimmering motion. The shadow-egg came to rest.

"From Los Angeles to Denver," said Naismith, "in—what? Five minutes? Four?"

"In one sense, no time at all," said Lall. "You realize, this is still the same instant as when we left the tube station. No time has elapsed."

Churan grinned up at him, showing yellow stubs of teeth. "Now we have reached the right position in space," he said. "Therefore we shall begin to move in time. Are you ready, Mr. Naismith?"

Without waiting for an answer, he touched the machine

again, and as if in response, the whole vast landscape beneath them dimmed, went dark, glowed to light again. Looking up, Naismith was in time to see the sun arching overhead like a fireball. It plunged into the western horizon with a flicker of red; then all was dark again. Light! The sun sprang up in the east, hurled itself overhead, plunged, and the world was dark. Light! Dark! Light! In the shadow-egg, Naismith saw the faces of Lall and Churan lit by the flickering alternation of days and nights. The landscape below, trembling in the swift waves of darkness and light, was tortured, changing, shaking itself into new forms. Naismith saw the city put out new tentacles, undergo writhing transformation, sprout taller buildings. It was like a grotesque animated film: the city had a rhythm of growth, rest, growth again.

Then, abruptly, there was a gigantic crater where the eastern half of the city had been. The growth cycle stopped. Naismith, rigid with fascination, saw areas of the city darken slowly, saw parts of it collapse into black ruin. "What year?" he asked hoarsely.

"Toward the end of the nineties, I think," said Lall's indifferent voice. "It's not important."

"Not important!" said Naismith automatically, but his voice died away as he watched the landscape below. The dead metropolis sank. It went down as if into

quicksand; the earth visibly swallowed it. Then there was only a featureless plain, shimmering in the ghostly twilight. For what seemed like hours, there was no change.

Again Churan touched the machine. The flickering alternation of days and nights abruptly stopped. It was early evening, the clear sky darkening to a steely blue in which one or two stars were visible. The whole landscape, as Naismith looked around from his elevated position, was unearthly vacant and still. Not a roof, or a wall, or the trace of a road in the whole immense plain; not a light anywhere.

"What year?" he asked again.

No one answered. Churan touched the machine again, and the shadow-egg began to drift down on a long slant. They were skimming along at ground level now, through the knee-high grasses, toward a long, low mound that was just visible against the sky. The rest of the landscape was empty and dark.

As they drifted nearer, Naismith felt his body trembling with the shock of the visceral realization: this was real— this earth and its wet grass, this dark sky overhead. He was here, physically and inescapably.

Back in Los Angeles, Klemperer was taking his classes; someone else would be living in his Beverly Hills apartment . . . No: they were all dead, dead and forgotten.

The thought gave Naismith an extraordinary feeling of release and pleasure. Whatever was going to happen to him now, at least it would not be the safe, dull middle age he had looked forward to . . .

The mound they were approaching was both larger and nearer than it had appeared at first: perhaps thirty feet high, it was immensely long and straight, like one of the long barrows of Wiltshire. There were faint, earthy and woody smells in the cold air; but the black hulk of the mound hung silent and still. It was covered with the grasses that grew on the plain; on the skyline, against the moonlit clouds, Naismith could make out an occasional small shrub or tree.

They drifted into the blackness of the mound, which closed like a stifling curtain about their heads: then, with shocking suddenness, they were dazzled by golden light.

CHAPTER FIVE

THE ROOM IN WHICH THE SHADOW-egg now floated was a gigantic hall, paved with some gleaming, hard substance that was at once like marble and like metal. The golden light surrounded them only in a circle a few yards wide; but in the darkness beyond, Naismith could make out the gleam of a pillar, a distant wall, the shapes of furniture. Here was the future:

and it was a deserted marble hall, buried under a mound of earth.

"What is this place?" Naismith demanded.

"A ship. A buried ship." The echoes of Churan's voice whispered away into emptiness.

Naismith thought, *A ship. What kind of a ship?*

Now, in their circle of golden light, they were drifting along a spattered trail of bright-red pigment that began a few yards from the door. It looked as if paint had been dripped from a can along the shining floor, and then as if something else that Naismith could not quite understand had happened to it: the red pigment was cracked, checked, almost like weathered paint, and it was powdering away visibly, in streaks, toward the nearby wall.

Naismith bent to examine it as closely as he could through the shadow-egg. The only thing it suggested to him was a wind, drifting sand away from a dune: as if there were an impalpable slow wind here, drifting molecules of the red pigment across the floor.

He followed the red streaks to the wall, where, by squinting, he could make out a hairline of bright red along the join between wall and floor, running out of sight in either direction.

Did the floor reject anything that did not belong? Were dust, dirt, and red pigment swept away automatically and disposed of?

He straightened. The wall itself was of the same metallic marble as the floor—marble, if such a thing were possible, with flecks and veins of gold diffused uniformly through it. A few feet farther on there was an elaborate metal frame on the wall, and Naismith's interest quickened: but the frame was empty.

They floated through an archway, into a chamber only less gigantic than the first. Divans and tables stood here and there, in little, widely separated groups. Rich, soft rugs covered the floor; the red trail had been dripped indiscriminately over them, but here, too, the pigment was drifting away in long, faint streaks.

Some of the furniture looked like parodies of the overstuffed sofas and armchairs of his own time—puffed, bulging things, looking inflated rather than upholstered, and apparently made all in one unit—no separate cushions, no legs underneath.

Other pieces were built on a different principle: these were suspended, like porch gliders, from metal frameworks which rose to cylinders at either end. Between these cylinders swung chairs and sofas which appeared neither stuffed nor inflated, but were as if poured from some taffy-like substance, in silky bright colors and with a curious, eye-deceiving mistiness of surface. They were like shapes of bright smoke poured out

of the cylinders at either end; and Naismith had the fanciful thought that if one turned off the mechanism in those cylinders, the chair or sofa would dissolve into vapor.

The red trail led them down a corridor lined with more of the empty metal frames; then through another archway; up a stair and around a gallery, over an empty chamber still larger than anything Naismith had seen; up another stairs, down a hall, through another doorway.

The room they now entered was a small lounge from which other doorways opened on all sides. Naismith's first impression was of a fully illuminated room, more cluttered and disorderly than anything he had seen until now. Then his attention came to a sharp, incredulous focus: across the room, he saw the shadow-egg plainly reflected in a mirror. . . , but his own image was not there. He blinked and looked again. There was no mistake; only the reflections of Lall and Churan stared back at him . . . there was something wrong about them, too, in the way they were dressed, or—

Then the vision faded, became transparent and was gone.

There was no mirror. He realized abruptly that the image had not been reversed; his mind had supplied the mirror, an effort to make an intelligible pattern out of what he saw. But what *had* he seen? . . .

Beside him, Churan laughed—a hoarse, nervous bark. "Don't worry, Mr. Naismith," he said.

Naismith turned. Both aliens were glancing at him with malicious smiles, but their attention seemed elsewhere. Churan made a final adjustment on the polished surface of the machine as the shadow-egg touched the carpet: then, leaning upon the machine with one hand as if it were a table-top, he got his out from under it and stood up. Over the stool on which he had been sitting, the machine hung in air, unsupported and immovable.

Churan exchanged a few words with Lall; both looked serious and intent. Bending over the machine, Churan did something to it that Naismith could not follow: and the shadow-egg burst like a soap bubble.

They were standing in the middle of the brilliantly lighted room, all three; Churan tucked the machine under his arm like a briefcase.

There was movement in one of the doorways, and a small creature walked out into view. Naismith had to look twice to see that it was a child.

Lall bent over the creature, smoothing its dull black hair mechanically with one hand. The child spoke to her in a high, thin whine; she answered perfunctorily and pushed it away. With an incurious glance at Naismith, the

child stumped off on its thick legs, sat down and began to play with a rag doll.

It was a quite incredibly ugly creature, greenish-brown-skinned, with sullen features. It looked like a caricature of Lall or Churan, everything about it coarsened and exaggerated.

"Is this your child?" Naismith asked, turning to Lall.

She nodded. "It is a female—her name is Yegga." She added a sharp sentence to the child, which was picking its nose; it left off and screamed once at its mother, without changing its sullen expression, then bent over its doll once more.

Naismith glanced around the room. Clothing was strewn over chairs and carpet; there were crumpled papers, even bits of food dropped here and there.

The high walls were paneled in vivid magenta and ivory: the ivory, Naismith discovered, was the wall itself, a dull, textureless surface; the wide magenta strips were hangings of the same substance as the suspended furniture, and had the same smoky outlines. Some of the chairs were of the same bright magenta; others were electric blue or ivory; the deep-piled carpet was apple green. The clothes piled carelessly here and there were of all hues.

"You left her here when you went back to my time?" Naismith asked, indicating the child.

Lall nodded again. "She would

have interfered with our work."

"What if something had happened, and you'd never come back?"

"But we knew we would come back, Mr. Naismith," said Churan, stepping nearer. "We saw ourselves arrive, just as we saw ourselves leave just now . . . remember?"

A tingling sensation went down Naismith's spine as, with a renewed shock, he thought of the vision he had seen. If Churan were telling the truth, for an instant, just then, time had been doubled back on itself.

Naismith sat down on one of the armchairs, watching Churan as he stepped to the wall, opened a panel, and thrust the machine inside. Lall was stretching herself, looking relieved but abstracted, like any housewife returning after an absence.

"Let me understand this," Naismith said vehemently. "You knew that your mission would be successful, then—because you saw yourselves coming back with me, before you left?"

"Yes. We knew." Churan began unfastening his jacket and shirt, pulling them off. He threw them on the nearest sofa with a grunt of relief. His hairless chest from the neck down, and his arms as far as the elbow, were a brownish green color, the green of algae; it was apparently the natural color of his skin.

"Sit down, Mr. Naismith," said Lall, taking off her blouse. "Dial for some food, Gunda." Her body, the same brownish green as Churan's, was squat and soft-looking; the proportions were not quite human. Their bodies were mammalian, but entirely hairless, and, compared with a human being of Naismith's time, hardly sexed at all. Lall's breasts were almost as small and flat as Churan's.

The child glanced up from its play, then bent over again. It was, Naismith saw with a shock of distaste, pushing long pins or wedges of metal into the soft body of the doll.

"There's a paradox here, then," he said, looking away with an effort. "Why not turn me over to your earlier selves? Then you wouldn't have had to go at all."

"No paradox. If we did that, it would pinch out the loop; then we would have to go just the same." Seeing Naismith's frown, Churan added, "Think of it as a short circuit, Mr. Naismith; then you will understand."

Ignoring the two men, Lall dropped her remaining garments and left the room. Churan, wearing nothing but sandals, went to one of the wall panels and paused with his hand on it. "You would like some food?" he said to Naismith. "Something hot?"

"I'm not hungry," Naismith said.

"But you must eat to live. Let

me offer you something, Mr. Naismith; perhaps you will like it." Pulling the panel aside, he rapidly thumbed down several movable strips, checkered green and white, which seemed painted on the wall and yet slid freely under his thumb. Interested, Naismith moved nearer, but Churan finished aligning the strips, closed the panel, opened another one. He reached in, took out steaming dishes one after another, and dropped them casually on a low, round table. "Please sit down, Mr Naismith. I am going to wash now, then we shall eat and have a talk." He smiled, showing his yellow stumps of teeth, and followed Lall into the adjoining room.

Naismith examined the food. There were four dishes, each containing a different mess, from which the diners were evidently intended to help themselves with their fingers. One was dark green and smelled like seaweed; one cream-colored, with pink lumps; one was a pasty mound, and the fourth was a varicolored mixture, with shreads of what looked like meat and vegetables in it.

From the other room came the muffled sound of voices. Naismith turned, stepped to the wall where he had seen Churan put the machine away.

He touched the panel, tried to move it aside as Churan had done, but the stuff was half like cloth and half like water—it resisted,

then seemed almost to flow between his fingers. The look and feel of it, no more definite of outline than it had seemed from a distance, were subtly unpleasant, and after a moment he gave it up. As he turned, Lall came out of the adjoining room, fastening a short-sleeved white tunic around her waist. Her skin, where it was visible, was now a uniform brown-tinted green; she had removed her makeup. So had Churan, who appeared behind her, dressed in sleeveless red pajamas. His pointed beard was gone; the whole shape of his face seemed different, and uglier, without it. Now Naismith realized something that had eluded him before—the Churan in the other shadow-egg had been beardless.

The child wandered in, seized a bowl from the table, spilling it, and took it to a corner, where it sat down and began stuffing itself.

"It is good to be clean again," said Lall. "Pardon me, I was thoughtless. Perhaps you would also like to bathe before eating, Mr. Naismith?"

"Later," Naismith said. "Right now, I want to talk."

Churan had seated himself at the table, and was tucking gobs of food into his mouth, using two fingers like a spoon. He grunted, chewing a mouthful that bulged his cheeks. "Good."

Lall sat down and offered Naismith the place beside her. "Please

help yourself, Mr. Naismith. Forks are not used here, but I am sure you can manage."

"I'm not hungry," Naismith said impatiently. He sat; the cushioned stool was uncomfortably low, and he had to jackknife his legs to get them under the table. "You eat, and I'll ask questions. To begin with—"

"Something to drink, then. Gunda, a cup of water."

Without looking up, Churan reached out to the wall beside him, opened the panel, and withdrew a porcelain cup which he set on the table.

Naismith took it in his hand; it was half filled with clear water; the cup was chill to the touch. He hesitated, then put it down. Bathing had apparently removed the aliens' perfume as well as their brown makeup; under the odors of the food and water, he could smell the cold, reptilian scent of their bodies. "I'm not thirsty, thank you."

Lall paused with her fingers in the dish of cream-colored substance. "Mr. Naismith, our foods may be unfamiliar to you, but surely you can drink our water, which is chemically pure."

Naismith stared at her. "Even water can be poisoned, or drugged."

"Drugged!" she repeated, and wiped her fingers slowly on the side of her patterned tunic. "Mr. Naismith, if you could be drugged, do you think we would have been

to so much trouble to get you here?" She paused, glanced at her fingers, then sucked them slowly clean. She pushed the dish away from her, leaned her elbow on the table, staring at him. The folds of her eyelids were odd, not quite human. "Think about it, Mr. Naismith. Do you remember Bursar Ramsdell—and the lawyer, Jerome? The peculiar things they did and said? *They* were drugged; that was simple to do." Churan had stopped eating to listen; his amber eyes were narrow and watchful. "But you are an altogether different problem, Mr. Naismith. Don't you realize, haven't you any idea—Think a moment, have you ever been ill?"

"My memory goes back only about four years. I don't know."

"But in those four years? An upset stomach? A cold? Even a headache?"

"I had a headache when I left Wells's office this afternoon. I mean—" He groped for a word to express the time that had elapsed, gave it up.

"Indeed? I don't understand. Did he use drugs?"

"No, some gadget—a headband, with clamps."

She raised her eyebrows. "Ah, I see. And the gadget gave you a headache. But aside from that, can you remember any slightest illness?"

"No," Naismith admitted.

"No, of course not. The Sheffth

does not become ill, cannot be drugged or hypnotized; his body rejects most poisons. He is *very* hard to deal with, Mr. Naismith; he must be treated with respect. So if you are thirsty, please drink without fear."

Naismith glanced down at the cup of water, then at the two aliens who sat watching him, motionless and intent. "I'll drink this," he said slowly, "when I understand one or two things a little better."

"Ask," said Lall, dipping up another lump of the cream-colored food.

"Let's begin with this place—you call it a ship. Who left it here, and why?"

"It's an interplanetary liner. When the Martian colonies were abandoned, in the hundred twenty-fourth century, there was no more need of it, they just left it. That was about a century ago."

"Why did you bring me here?"

"To teach you, Mr. Naismith—certain things which—"

Naismith made an impatient gesture. "I mean why *here*? Why couldn't you have taught me these things, whatever they are, back in Beverly Hills?"

She chewed, swallowed. "Let us say, there was a need to be inconspicuous. This is a dead period, for hundreds of years on either side. No one knows about this abandoned liner except us, and no one would think of looking here."

Naismith knotted a fist impatiently, stared at the taut skin over the knuckles. "This is getting us nowhere," he growled. "You talk about a dead period, Shefthi, Zugs—it's all Greek to me. How do I know there's a word of truth in it anywhere?"

"You do not," said Churan, leaning forward earnestly. "You're right, it is futile for us to talk about these things. Talk goes around and around, endlessly." He made a circular motion. "But there is another way."

He got up, crossed to the opposite wall, where he opened one of the panels. He reached in and took out a metal framework, with an oblong box dangling from a strap. "This, Mr. Naismith."

Its resemblance to the machine Wells had used was obvious at a glance. Naismith pushed his stool back. "No," he said.

Churan paused, disconcerted. "But I haven't even told you about it yet."

"It doesn't matter—I've tried one. Once was enough."

"You *tried* one?" Lall repeated, with a disbelieving smile. "Where was this?"

"At Wells's office. I blanked out, evidently—But you know all about that—that's why the police were after me, back there at the campus."

Both aliens looked alarmed. Lall turned and shot a question at Churan—rapid guttural syllables, in

which Naismith caught the name "Wells." Churan answered explosively, then both turned and stared at Naismith.

"This may be tremendously important, Mr. Naismith. Please describe the machine he used, and the effect it had on you."

Naismith did so, as best he could. As he spoke, both aliens visibly relaxed; after a few moments, Lall raised her hand to stop him. "That's enough, Mr. Naismith. It's apparent that this was not exactly the same kind of machine."

"I never said it was. But nobody is going to monkey with my mind again, with *any* kind of machine."

"What are you afraid of, Mr. Naismith?" Churan asked softly.

Naismith said nothing for a moment. Then: "You're the one who ought to be afraid. I *killed Wells* while that machine was operating."

"Evidently because there is something in your past that you subconsciously did not wish to remember. That is not hard to understand. Let me put it this way, Mr. Naismith. This machine will not bring back any of your own memories. Instead, it will add certain memories which you never had before."

"It's out of the question," Naismith said flatly. "Teach me the ordinary way, if it's so important. Start with the language. Give me books, records, whatever there is. I happen to be quick at languages.

Even if I weren't, you've got plenty of time."

Churan shook his head. "Books and records could be falsified, Mr. Naismith."

"So could that thing."

"No, it could not," Churan said hoarsely, blinking with anger. "When you experience it, you will know. *That* is why no other method will serve. It's not just a question of time, Mr. Naismith. You must be convinced beyond any possible doubt, that what we are going to tell you is true."

They looked at each other in silence for a moment.

"Why?" Naismith asked bluntly.

The two aliens glanced at each other with resigned expressions. Churan sat down, holding the helmet and the control unit in his lap.

"Mr. Naismith," Lall said after a pause, "what if you knew that the ruling class of your own people had *deliberately* thrown you back in time, to the year 2002, believing you would be killed?"

"Why should they do that?"

Her fingers stretched into claws, then relaxed. "Because they are selfish and cowardly. After they had made up their minds to create the Barrier, they felt the Shefthi would be more a danger than a—"

"Wait," said Naismith with an impatient gesture. "After they created the what?"

"The Barrier." She grimaced. "You see, it's all so difficult without

the educator. . . . Wait a minute." She snapped three words at Churan, who got up, went to a panel he had not used before, and came back in a moment with a small black cylinder. Lall took it, pushed dishes aside, and began drawing on the table.

Wherever the tip of the cylinder touched it, the clear gray table-top clouded, turned inky black. The change seemed to take place in the substance of the table-top itself, rather than being a matter of something applied to the surface.

"Time is like a tree, Mr. Naismith," said Lall, sketching rapidly. "Here it begins, at what we call Event Zero—the stupendous, unimaginable explosion in which the universe was created. Here is the main trunk. Here the branches. They are offshoots, they don't concern us—they lead to grotesque, distorted worlds. Here, high on the main trunk, is the world we came from."

She glanced up. "You must imagine an absolutely sterile Earth, Mr. Naismith and one gigantic City. Twenty thousand people live there; that is the human race. The City stands nine-tenths empty. Once it had a population of ten millions. There are miles of empty apartments, whole corridors that no one uses, all lighted, ready."

"The birth rate's falling?" Naismith asked. "Why don't they do something about it?"

Both aliens grinned, their eyes

narrowing to slits. "They don't want to," Churan murmured. "The fewer of them there are, the more for each one. What they want is more power, more things for themselves—not more competition. But they're afraid."

"Of what?"

Churan blinked slowly, seemed to measure his words. "The Zugs, Mr. Naismith. Originally, they came aboard some cargo vessel, centuries back, when there was interstellar travel. They were not much of a nuisance until they mutated. The Shefthi hunted them for sport, the Lenlu Din watched. But now they are very intelligent—more intelligent than men, perhaps. They hide in the tunnels inside the City—miles of tunnels."

"Not 'they' any more—'it,'" said Lall slowly.

Churan blinked and twitched, accepting the correction impatiently. "In our own time, the ruling caste found a way to make a Time Barrier that would pass only the Lenlu Din into the future. It would be tuned to their mind patterns, you see; in that way, on the far side there would be no more Zugs, and also no more Lenlu Om. Just Lenlu Din, all by themselves, safe and contented. You understand? But it is not going to work. We know, because they are sending back messages through the Barrier. There is one Zug up there, still alive. And they are very frightened." He grinned.

Naismith took the cylinder from Lall's cold fingers, pointed it at the top of the sketch she had drawn. "Let me understand this," he said. "This is your time, here. Now the Lenlu Din have made this Barrier—" He made a dot, then drew a heavy black line below it.

"No, no. They are *going* to make the Barrier." Lall took the cylinder back, reversed it, passed it over the line he had drawn. The black mark faded out. Using the other end of the cylinder, she drew another heavy line above the dot. "Remember that this is still in our future, several months ahead. It has not happened yet."

"If it hasn't happened yet, what makes you so sure it's going to?"

The woman sighed. "These are only ways of speaking. Surely you understand that by now, Mr. Naismith. From your point of view in 2002, all this 'has not happened yet.' But here we are. As for the Barrier, we know it exists in the future. We know it is going to work, except that one Zug will be left alive. As Gunda has just told you, we know all this because we have received messages from beyond the Barrier."

Naismith sat back. "The future can communicate with the past?" he asked disbelievingly.

"Haven't you seen that it can? Didn't we go back to the 21st century, and scoop you up like a fish in a net?" Lall's amber eyes were brilliant, her fingers tense.

"Then why don't they simply tell their earlier selves to do things differently, and eliminate the trouble?"

"They can't find the trouble," said Lall, her eyes shining. "It is impossible for a Zug to pass through the Barrier alive. But their detectors show that there is one, and that's why they are so frantic. When we learned that, we saw our opportunity. She leaned forward, intent, lips moist. "We searched the main stem as far back as the 21st century. Every anomaly above a certain value had to be investigated. It took *years*, subjective time. It was only the most incredible luck that we found you at all. Then we had to prepare this place; then go back to 2002 and learn the language, customs, everything, from the beginning. And now it all comes together. Because you see they are *desperate*. If you return, with some story of having built your own time generator, they will believe you—they have to, you are the last Shefth, and they need you." Both aliens were breathing heavily, staring at Naismith across the low table.

"Then a Shefth can go through the Barrier?" asked Naismith.

"The Shefthi are Lenlu Din," Churan answered. "If they had let well enough alone, all the Shefthi would be on the other side of the Barrier, and there would be no problem with the Zug. But they didn't want any warriors in their

safe future, without Zugs, without Lenlu Om. They would have killed you, but they were afraid. So they invented a story about an expedition to kill Zugs in the past, and threw you all back. At random, without destination. Without protection. The shock of landing was to kill you all. Even if it did not, without equipment, you could never get back to bother them. That was their plan."

"I see," said Naismith, abstractedly drawing thick, short lines.

"What is your reaction to this, Mr. Naismith?" Churan's voice was strained.

"If it's true, I'm . . . very interested," said Naismith, staring at the fist that held the cylinder. "Now one more point. What's this about the Lenlu Om? You said the Barrier was to keep them out too. Who are they, or what are they?"

"We are Lenlu Om," said Chura quietly. "The name means 'the Ugly People.' We are their servants. They brought us from another place, centuries ago. We are not considered to be human."

Naismith glanced up: the faces of all three aliens had turned hard and expressionless. He put the cylinder down carefully and stood up slowly, feeling their eyes on him. "And all this," he said, "in more detail, you would have taught me with that thing." He nodded toward the device in Churan's lap.

"As well as many other things.

The language. We can teach you to speak it perfectly in less than two hours. And you must speak it perfectly. Then the City itself—the castes—forms of courtesy—a thousand and one things you must know, Mr. Naismith. You can learn it all by primitive methods, of course, but believe me, it is not worth the effort."

"But you used so-called primitive methods to learn English."

Churan hesitated. "Yes and no. We employed the educator—we recorded disks from the thoughts of natives whom we captured and drugged. But that is not the same as having an edited subject disk all prepared. It was tedious, it took time. Then we also had to spend time establishing identities for ourselves. We took, I don't know, perhaps six months, subjective time. Without the educator, it would have taken years."

Something that had been bothering Naismith came abruptly into focus, and he swung around, with one foot up on the bench, facing Churan. "Tell me this," he said. "Why not simply go back, learn what you need to know—then put it all on one disk—*meet yourselves arriving*, and cut out all the trouble?"

Churan sighed. "First, as I told you before, it would pinch out the loop. You cannot use time in that way. Second, even if it would work, we might hesitate to do it because if—" He hesitated.

"The Barrier," Lall said, picking up the cylinder and idly playing with it. "By concentrating so much paratime energy, the Barrier has thrown the whole system out of balance. Therefore we try not to create any more anomalies than necessary; there are enough already. The Lenlu Din say it is because the Universal Mind is de-ranged."

"The what?"

"Something they believe in," Lall replied with an impatient shrug. "They have a religion—this is part of it. The Universal Mind maintains the universe in existence by constantly remembering every particle and vector. If it should forget something, that area would cease to exist. Well, they say that the Universal Mind now has less than the required number of circuits to remember everything; consequently it is constantly making substitutions—like someone transferring funds from one bank to another to make up a shortage, and then from that bank to a third, and so on indefinitely. *We* say it is merely a structural imbalance in the time matrix. But you can look at it any way you like; what it means is that the nature of reality is being locally altered." She smiled faintly, and indicated the sketch she had drawn on the table-top. "Or, to put it more poetically, Mr. Naismith—the Tree is being shaken."

CHAPTER SIX

AFTER A MOMENT LALL AND Churan yawned together like two frogs, showing the dark greenish roofs of their mouths: the effect was grotesquely unpleasant. "We are tired," Lall said. "It is late." She rose, followed by Churan, and led the way to the room opening off the far end of the lounge, opposite the one she and Curan had used.

The door was closed, but opened at her touch. She stood aside. "This will be your sleeping room, Mr. Naismith. I think you will find all you need."

The two stood waiting. Naismith glanced in; there was a low bed, a footstool, some ambiguous half-real draperies on the wall. He made no move to enter. "Thank you," he said.

"You will sleep here?" Lall asked plaintively.

"When I am ready. Good night."

"But at least you will inspect the room, to see if everything is to your liking?" Churan demanded.

Lall turned her head and said hissing, guttural speech. She turned back. "Just as you wish, then, Mr. Naismith. We will talk again in the morning."

The two aliens crossed the lounge and entered their own room. The door slid shut after them.

Naismith did not hesitate. He went first to the section of the wall

where he had seen Churan deposit the shadow-egg; but, as he had expected, the half-tangible panel refused to open for him.

He paused a moment, listening: he could hear Lall and Churan moving about in their room, talking sleepily together, with occasional bursts of acrimony. There was no point in waiting any longer. Naismith moved noiselessly out into the corridor. The drifting red trail guided his feet; at the first turn, he deliberately left it. He went down a flight of stairs, stepped through a narrow doorway, and found himself in darkness relieved only by spectral, phosphorescent glows from the outlines of machinery here and there. He kept moving down the narrow aisle, under a low ceiling, not pausing to examine any of the machines he passed. For the moment all he wanted was to put distance between himself and the two aliens.

After a quarter of an hour, even the phosphorescent markings thinned out and ceased. He was groping in total darkness, thoroughly lost in the interior of the great ship.

Satisfied that he was secure for the moment, Naismith sat down in the darkness and considered his position. In spite of its almost overwhelming implications, the problem was basically that of buyer against seller. Each party had something the other wanted, and

each was determined to give as little as possible. Naismith's first objective was to keep the aliens from coercing him: that was now accomplished, since he was out of their reach. His next objective must be to improve his bargaining position. That meant above all increasing his knowledge: for it was knowledge that Lall and Churan held out as bait, and knowledge again that gave them a tactical superiority. His course, therefore, was clear. He must begin by exploring the ship, no matter how many weeks or even months—

The thought broke off. A breath of danger was passing down the narrow corridor, making his skin prickle and his nostrils widen. He stared blindly into the darkness: was the shadow-egg, invisible and intangible, passing there?

Whatever it was, in a moment it was gone. Naismith rose and once more began feeling his way down the corridor.

Hours later, he found a narrow passage leading off at right angles, and crossed the waist of the ship, emerging finally in a huge, deserted salon. Here the moving overhead lights followed him again, but there were no red trails on the floor, and he guessed that Lall and Churan had never been in this area.

In the days that followed. Naismith prowled the empty ship alone. Its gigantic scale never ceased to oppress and astonish

him: it was impossible to imagine what kind of people could have built a vessel like this, equipped it so massively and elaborately, and then left it to be mounded over on the Colorado plain.

Wherever he went, the lights winked on ahead, winked off behind. There must be some way of illuminating whole rooms at once, but Naismith had not found it. He moved in a moving circle of pale light, while all around him was green silence. There were cyclopean galleries and choirs, around which he crawled like a fly; there were baths, gymnasia, theaters, game rooms, machine rooms, all empty with an inexpressible emptiness, hollow, not-quite-echoing. . . .

Never once did he catch a glimpse of the two aliens or their shadow-egg, although he felt sure they were trying to find him. Everywhere he went, there were enigmatic, silent machines, including some that he guessed were television instruments, but he could not make them function. Here and there he saw symbols printed on the walls; they were in an alphabet resembling the Cyrillic, but with many added characters. Nowhere could he find a floor plan of the ship, a directory, a travel booklet, anything that would give him the least clue to the object of his search.

At last, on the fourth day, entirely by accident, he found it.

He was in a room filled with the omnipresent balloon-like arm-chairs with tall, angular devices, chest high, on which square greenish plates of metal were arranged in two slanting, overlapping rows, forming an inverted V. They might have been magazine racks, with the thick metal plates substituting for magazines. As the thought came, Naismith put his hand casually on one of them, and the thing flapped open with a clatter. Crouched, ready to fight or run, he stared at it.

The rank of overlapping plates had opened, exposing the whole face of one of the plates: and where a blank square of greenish metal should have been, he saw a moving, brilliantly colored picture.

Naismith's breathing quickened. He hardly heard the voice which spoke casually and incomprehensibly from the machine. This was it; he had found it: this was the library.

The picture he was watching showed a woman in an oddly cut red garment, posturing before a background of vaguely Oriental domes that gleamed in bright sunshine. The picture changed; now he was looking at a passageway between earth-colored buildings, down which men in white robes walked with heads bowed. It might almost have been a street scene in ancient Turkey or Egypt, except that the men were leading

bright blue, hairless beasts of burden. . . .

The picture changed again. Now, under a gigantic orange sun, stick-thin brown creatures with many legs were building a scaffold of wooden rods. Naismith understood that he was being shown an interstellar travelogue: ports of call at which this very ship had touched perhaps . . . He watched until the pictures stopped, then closed the machine, opened it at a different place.

A new picture sprang into being; this time he saw two men, with thin, bearded faces, demonstrating some sort of physical apparatus. There was a thing that looked a little like a Crookes tube, and what might have been a series of accumulators. He could not understand a word of the spoken commentary, though the language sounded hauntingly familiar. The subject, at least, was apparently unrelated to the previous one. The arrangement, then, was either random or alphabetical, with a strong probability of the latter . . . all he had to do was to find the key to it.

That took him two more days. Then his progress was rapid. The written language was a much modified English, phoneticized, with a simplified grammar and many vocabulary changes. The spoken language was more difficult, so slurred and elided that it was almost impossible to follow, but Naismith

found he could neglect it by concentrating on reference codes which produced displays of printed books, page by page. By the end of his fourth day in the library, he had an accurate conception of the world these star-travelers had inhabited.

He had found out two things of importance, and another of possible significance. First, the entries under "Time Energy" in the library showed that the state of the art had not advanced since his own era; in fact, the temporal energy generator was regarded as a toy. There was no possibility, therefore, of his discovering another shadow-egg aboard the ship or being able to construct one: that invention was still to come.

Second, the Lenlu Om—Lall's people—were natives of a planet of 82 Eridani, and had been introduced into the Solar System in about the year 11,000. They were not called by that name, but the characteristics of those shown in the pictures were unmistakable.

Third, the framed pictures Naismith found on the walls, in places where Lall and Churan had apparently never been, were paintings and stereographs of Terrestrial scenes, including a number of portraits. The people represented, like those in the library machines, were ordinary native Terrestrials, in no way remarkable to Naismith's eye except for their costumes.

As far as Naismith could tell, pictures were missing from their frames wherever the aliens had gone. It was conceivable that this was simply the result of looting, but Naismith did not think it likely. The aliens seemed indifferent to all the other articles of value around them in the ship, and had apparently taken nothing from the world of 2002. It was Naismith's tentative opinion that something in the pictures was distasteful to Lall and Churan—that they had taken them down, and very likely destroyed them, in order to be rid of an unpleasant reminder.

Naismith sat up in bed. The room lights slowly came on as he did so, showing the unfamiliar walls paneled in magenta and apple green. As usual, he had worked in the library until he felt it unwise any longer to ignore his increasing fatigue; then he had chosen a new suite of rooms—there were hundreds, in this section of the ship alone, and he never used the same one twice—prepared and eaten his dinner, and gone to bed. But the thought that had come to him was so radical, so breathtaking—

In all the time he had spent aboard the ship, although he had many times wondered what had become of its passengers and crew, it had never once occurred to him to look for any personal possessions they might have left behind. The spotless, orderly appearance of

everything in the ship had made him assume unconsciously that the rooms had been cleaned out and set in order when its passengers left.

And yet he knew that this ship cleaned and tidied itself. Dust deposited anywhere in a room slowly crept toward the nearest baseboard gutter, where it ran into channels—Naismith had traced them in the narrow passages behind the walls—leading to storage bins and, Naismith guessed, eventually to conversion chambers. Clothing taken from a closet and dropped on the floor would slowly, over the course of a few hours, creep back to its proper place, shedding its dirt in the process. Even the trails of sticky pigment Lall and Churan had left to guide them around the ship must have to be renewed every few days. And therefore—

Naismith swung himself out of bed in mounting excitement. Having examined a few of the wall closets in these living suites and found them empty, he had lost interest in them. But some of the bedrooms—this one, for example—had clothing in their closets!

He cursed his own stupidity. If clothing were part of the rooms' standard equipment, as he had unthinkingly assumed, why would some rooms have it and not others? But if this room had been occupied at the time the ship made its final landing, and if the occupant had

left his clothing behind, then it was an almost foregone conclusion that he had left other possessions as well.

Naismith went straight to the largest wall panel, thumbed the control strip to open it, found it empty. He tried the smaller, cubical one on the adjoining wall.

At first it seemed equally empty; then he saw a scrap of paper or foil on the bottom of the compartment. He drew it out. Printed on the foil in luminous purple letters were the words, "GIGANTIC ALL NIGHT GALA! Dancing! Sensorials! Prizes! Y Section ballroom, beginning 23 hours 30, 12th day of Khair . . ." followed by a date which Naismith translated as 11,050.

It was little enough in itself, but Naismith clutched it as if it were precious. He went on from one wall to another, searching out panels and opening them. But the results were disappointing: a plastic identity card made out in the name of Isod Rentro, and bearing the stereo picture of a man's lean, foxy face; a bundle of metallo-plastic tokens strung on a wire; and a toy of some sort, a gray plastic box with a tiny view-screen.

Absently Naismith pressed the button on the side of the box. The view-screen lighted up, and he was looking into the pale, lean face of the man on the identity card. A voice began to speak—a nasal, negligent, cultured voice. Nai-

smith caught a few words, recognized them as a date a few weeks earlier than the one on the "all-night gala" announcement.

He set the box down with reverent care. He had had an incredible piece of luck, and had almost failed to recognize it. He was looking at the journal of Isod Rentro, a passenger aboard this ship in the year of our Lord 11,050.

Rentro was dressed in a loose-fitting blouse of metallic silver-white, with a violet scarf at his throat. His skin was pale and unhealthy-looking, very faintly freckled, as if it had seldom been exposed to the sun. His hands were thin. He gestured wearily with a long, carved holder in which a green stick of something was smoldering.

The scene flickered, changed. Naismith was looking out at a vast space in which crowds of colorfully dressed people moved, while Rentro's commentary continued. He was looking, Naismith realized, at the spaceship's berth before the takeoff. Another ship was visible in the distance, under the dome of a gigantic transparent roof. Music was playing; colored streamers were twisting through the air.

A chime sounded, and Naismith saw faces turn, hands begin to wave. Like an elevator dropping, the whole vast concourse slowly began to drift downward. Above, the transparent roof parted, opened out into two graceful wings. They,

too, drifted downward and out of sight.

Naismith had a glimpse of a misty landscape, quickly and silently shrinking. Clouds whipped past and were gone. The horizon grew round, then the earth assumed the shape of a bowl, a sphere, visibly dwindling. The sky grew purple, then black; stars appeared.

The screen flickered again. Rentro came into view once more, still sitting calmly in his cabin, with an expression of amused boredom. He spoke a few final words, gestured, and the screen went dark.

It lighted again immediately. Rentro appeared, dressed in a different costume, against a background Naismith recognized. He caught his breath involuntarily. This was a place he knew—the great lounge at the end of this section, the one with the enormous central chandelier and the tiers of balconies.

Walls, furniture, everything was exactly the same: but the vast room was brilliantly lit, aswarm with people. It was like watching a corpse suddenly grow vividly, beautifully alive.

Rentro turned, faced the screen, spoke a few words. A young woman in a white gown came into view; her complexion was rosy, her eyes surrounded by startling blue rings of cosmetics. Rentro took her casually by the arm, spoke her name—Izel Dormay—and added

a few words which made them both smile. The view changed again. . . .

Naismith followed the record through the first few weeks of the voyage. Allowing for the difference in technology and in the incredible consumption-level of these people, it was very much like a luxury cruise of the 20th century. The passengers played games, watched the entertainment screens, ate, drank, strolled about. Once or twice a ship's officer appeared, spoke a few polite words into the screen. The crew and most of the passengers were human, but Naismith occasionally glimpsed members of Lall's race.

Then there was a change. It happened so gradually that Naismith was not aware of it at first. The crowds in the lounges and game rooms grew less. Crew members in their gray and black uniforms were more in evidence, and moved more purposefully. Once Naismith saw a stumbling, slack-jawed man being helped out of a room by two crewmen: he looked drunken or perhaps drugged. Rentro's commentary was disdainfully cool, as usual, but Naismith caught a worried expression on his face.

A day or so later, there was no mistaking the difference. Few people were in the lounges or on the promenades. Rentro ventured out briefly, then went back to his cabin; his next entry in the journal

was made there, and so were all those that followed. His expression grew daily more strained: he looked, Naismith thought, like a badly frightened man. Once he made a long speech into the machine, which Naismith would have given much to interpret, but he could only catch a word here and there, no matter how often he played it over—"carrying," "danger," "contagion."

A day later, the entry was brief, and Naismith was able to make it out; "We are returning to Earth."

The rest of the journal consisted of brief entries, only the date and a spoke at some length, seriously and few perfunctory words, with two soberly, from time to time consulting a tablet he held in his hand: it occurred to Naismith that he was making his will.

The second time, after announcing the date and repeating a phrase he had used several times before, Rentro suddenly and horrifyingly lost his composure. With a distorted, writhing face, he shouted something into the machine—four words, of which Naismith could make out only one. It was "Greenskins"—the contemporary name for Lall's people.

Two days after that, the journal stopped. It simply ended, without any clue to what had happened next.

Naismith searched the adjoining suites, then and on the following

day, and found three more such personal journals. When he had run them all off he was no wiser: all told essentially the same story, and all ended abruptly, at varying times, before the ship reached Earth.

For the time being, he gave it up. Naismith had been two weeks alone in the ship, enduring its green silences, and the solitude was beginning to wear on him. He began to think of going back to the aliens. He had explored the ship as thoroughly as he could, in the limits of the time he had spent, and without going near the red trails left by Lall and Churan.

It occurred to him for the first time that this precaution might have been unnecessary.

Suppose the aliens had begun to use the time machine to search for him as soon as they had found him missing. Almost certainly they would have begun by searching their own lounge and the corridor outside it, for a month or so into the future. If they had done that, *and found him*, there would never have been any necessity to search elsewhere in the ship. Accordingly, if Naismith was in fact *going to be found* in the aliens' suite or near it, he could roam anywhere he pleased until that time, elsewhere in the ship, without any fear of discovery.

It was a curious sensation, following the fading red trail on the carpet. Here and there still fainter trails branched off. Doubtless the

aliens had first explored the ship at random, as he himself had done; these early trails led nowhere. But the strong red trail, recently renewed, meant that there were places in the ship the aliens wanted to revisit. What were they?

The path led through empty galleries and lounges, down a broad corridor, up a stair . . . Naismith's own knowledge of the ship soon failed him; he no longer knew where he was except in a general sense.

He passed through an anteroom into a vast, echoing natatorium surrounded by balconies. Cushions and reclining chairs were strewn beside the pool; the tank itself was filled with clear water. There was no debris on the bottom, not a particle of dust visible on the surface. Remembering the colorful crowds he had seen in Rentro's journal, Naismith was oppressed by the sense of their almost-living presence—as if they had only stepped into the next room for a moment. . . .

Beyond the natatorium was a row of dressing rooms, and beyond that, unexpectedly, a small gymnasium. Here, for the first time, there was evidence of an alien presence. The parallel bars, horses, trampolines had been pushed aside, and a few unfamiliar pieces of apparatus lay in the middle of the polished floor. They were unimpressive—three small black-metal boxes, one with a line of

transparencies and dials on its upper face—but Naismith was careful not to approach them. He skirted the room cautiously, looking for a continuation of the red trail, but there was none: it ended here.

He turned. And Churan was standing in the doorway, with a black, lensed machine on a tripod beside him.

With shock tingling through his nervous system, Naismith took a step forward; the machine swiveled slightly on its mounting to follow him. He stopped.

"Don't do it, Naismith," Churan said tensely. "This is a force gun, locked onto you as its target. If I press the release—" he showed Naismith a tiny control box in his hand—"or if you move too suddenly, the gun will fire."

Naismith forced himself to relax. "Why the armament?" he asked contemptuously.

"We have decided it is safer. If you have no plan to attack us, it will make no difference to you. Now follow, please, and make no sudden moves for your own safety."

He backed away, and the machine rolled back beside him, its glittering lenses swiveling to stare at Naismith, almost with an air of intelligence: as if the machine were alive, watching him. . . .

I should have looked for the arsenal, Naismith thought, with a sick feeling of defeat. *But perhaps*

it would not have made any difference—they would have found me there before I could take anything . . .

Churan backed out into the middle of the corridor and stopped. The headband with its metal box lay on the carpet. "Pick it up," he ordered curtly.

Naismith moved forward as slowly as he dared. "Where are Lall and the child?" he asked, temporizing.

"Safe," Churan spat. "Pick up the helmet!"

Naismith stooped, got the thing in his fingers. "Tell me, Churan," he said, "why all this caution? Why can't you just go forward in time and see if everything turns out all right?"

Churan's amber eyes gleamed. "We did that, Mr. Naismith. The tests were ambiguous. We decided to take no chances with you. Put on the helmet."

Naismith raised the headband, weighing it in his hands. He swayed slightly, watching the feral head of the machine turn, almost imperceptibly, on its oiled socket. What was the principle involved? Heat? If he could somehow manage to reduce his body temperature—

Churan glared. "Put it on!"

Naismith's body tensed. For reasons he could not clearly understand, the thing he held was intensely abhorrent. It might be better to jump, take his chances—

"I warn you!" said Churan, holding the control box in squat fingers.

Naismith's lips pulled back in a grimace. He raised the headband, slowly fitted it over his skull.

The last thing he saw, before darkness crashed around him, was Churan's triumphant smile.

His head ached. He was sitting on the floor, holding his head in his hands to quiet the throbbing pain. He looked around, moving with exaggerated caution, for the slightest motion made his head feel as if it were about to split.

The headband lay across the room, bent out of shape. Churan was staring at him, was breathing hard; sweat was beaded on his narrow forehead.

"How do you feel?" he asked hoarsely.

Naismith tried to sit up, groaned and slumped back. "Pain in my head," he answered indistinctly. "What happened?"

"You tore off the helmet half-way through," Churan muttered. "It's lucky for you that I had turned off the gun. Make no mistake—it's locked on again now!" He twitched, and resumed, "I don't understand how—You are not supposed to be able to resume voluntary control until after the memory unit has stopped working. . . . Do you understand everything I say?"

"Why shouldn't I?" Naismith asked, and then halted, transfixed by a realization that almost drove

his pain into the background.

He and Churan were not speaking English. They were talking in the same hissing, guttural tongue the aliens used; but now every word was clear.

"Who is Fiz Nexi?" Churan demanded, inching nearer.

"The hereditary aristarch," Naismith answered impatiently. "She —" Once more he stopped in dismay. The knowledge that he found in his mind, a complete and detailed recollection of Nexi and her court, had not been there before.

"The process was successful, then," Churan said with evident relief. "You missed the end of the disk, of course, but we can supply that later, if necessary. I was afraid that—Sit still until you feel better." He turned, retreated.

He was back in a moment, followed by Lall. Both aliens were staring at him with an air of suppressed excitement. Churan, muttering something under his breath, stepped over to the wall and picked up the damaged helmet, showing it to Lall.

Her muddy complexion paled. She held out her hand for the helmet, fingering the bent metal unbelievably. "He did that? While the educator was turned on?"

Both aliens stared at Naismith. "Does he have the compulsion?"

"Obviously not."

Lall snarled at him, "How do you *know*?"

The pain in Naismith's head

had eased a little. He got gingerly to his feet and retreated with cautious movements to the wall. He leaned back, watching and listening, while the aliens erupted into a sudden furious argument.

"How, then?" Churan demanded, thrusting his face into Lall's. "Tell me how."

"Try it yourself!" she returned, and thrust the helmet into his hand.

Churan looked at it with surprise; his amber eyes narrowed, then glinted with understanding.

"The disk will begin at the moment it was interrupted," Lall said. "Go ahead, put it on—what harm can it do *you*?"

Churan grinned mirthlessly. "True. Very well." He pried dubiously at the bent framework. "I do not know if it will function—" He shrugged and put the helmet on. His eyes closed, then opened again.

"Well?" the woman demanded.

Churan took the helmet off slowly. "You were right. The compulsion formula was almost all there—he could have heard only the first syllable of it."

Again the two aliens stared at him, with something like respect in their faces.

"This changes matters," Churan muttered. He glanced sidelong at Naismith, and added, "Don't forget, he understands what we say now. Come—" He took Lall's arm, drew her aside.

Naismith straightened up. "Just

a moment!" he said. "Are you going to go on trying to keep me in the dark? Because if so, I give you warning now that my cooperation is over." He gestured at the gun on its tripod. "Turn that thing off, and tell me what that helmet was meant to make me do."

The aliens looked at him sullenly. "There was a compulsion formula in it," Lall said at last. "to make sure you would do as we wish, when you are past the Barrier."

Naismith said, "Then the story you told me about myself was false?"

"No, it was true, every word," said Churan earnestly, coming forward a step. "We only wanted to make sure—"

"Wait," Lall interrupted. She peered into Naismith's face. "Mr. Naismith—do you hate the Lenlu Din?"

Naismith opened his mouth to reply, then shut it again. At her words, unexpected memories had begun to swim up out of some black place in his mind.

"The Lenlu Din . . ." he said. Plump, floating people in puffed costumes of scarlet and gold, peach, frost-white, orchid, buff. Shrill overbearing voices, glittering eyes. . . .

"This may be the answer," the woman was saying in a tense undertone to Churan. "Forget the compulsion—if he really hates them, he will do it because he

wants to. Let us try him on the lie detector. What can we lose now?"

Churan looked uncertainly at Naismith, and there was a flicker of anger in his eyes. "How can I tell?" he muttered. "He is a Shefth."

"All the more reason. We will do it. Come." She beckoned to Naismith, started off down the corridor.

"The gun," said Naismith, not moving.

"No," she said. "We are going to be frank with you, Mr. Naismith—but the gun stays, a little longer."

Naismith shrugged and followed. The gun retreated as he moved, rolling smoothly along beside the two aliens, with its lensed muzzle trained steadily on him.

It was that way all the way back to the aliens' suite. The pain in Naismith's head was receding, only a dull ache now, but his mind was confused by an insistent crowd of images, sounds, voices babbling together, faces that were unknown and yet familiar . . .

Yet he was dimly aware that there was something unexplained about what had just happened. Why had Churan found him just *there*, in the corridor outside the gymnasium? . . .

They entered the lounge, where Yegga sprang up from the floor, spilling a bowl of something greenish-yellow, and went to its mother.

She cuffed it aside impatiently. "Sit down, Mr. Naismith. Gunda, get the detector."

"It will take a few—" Churan began. "No, I am wrong, I have to retrieve the time vehicle anyway. I may as well do it, and then—"

"Go, get it," she said impatiently. Churan went out, with a last sullen glance at Naismith.

Naismith lowered himself into a chair, thinking hard. Lall sat down opposite him, her long amber eyes hooded and watchful. "What were you doing in the ship, all that time until Gunda found you?" she demanded.

Naismith stared back at her somberly. Twice now, he was thinking, someone had tried to tamper with his mind—first Wells, now Churan—and twice, while he was unconscious, something in him had exploded with incredible violence . . . some *thing* buried in his mind. Naismith felt the birth of an angry impatience. This must not go on; sooner or later he must find a way to reach those buried depths, force them to give up their knowledge. . . .

"I was in the library," he answered.

Lall's fingers curled tensely on the table. "And what did you find there?"

She was so evidently nervous, anxious about his reply . . . Naismith considered her narrowly, and said, "I found out that the time vehicle is not a part of this era's technology."

Her body visibly relaxed. She laughed. "I could have told you

that much, Mr. Naismith. No, if you are going to build your own time vehicle, you cannot do it here. For that we must take you many centuries forward."

"How far?"

She shook her head. "When the time comes, Mr. Naismith."

Churan came in, carrying the machine under one arm and an oblong gray case in the other. He set the gray case down on the table, with a curt, "Here," and crossed the room to deposit the other machine in the wall cabinet.

Lall was removing the cover from the oblong box, revealing a smooth gray-metal base with two protrusions—one a dull pinkish-gray ovoid, the other a more complex shape, somewhat like a misshapen mushroom.

"This is an ordinary lie detector, Mr. Naismith," Lall said, pushing it toward him. She moved her chair quickly, stood up and stepped back. Churan was at the farther wall, watching intently. The gun on its tripod pointed steadily at him.

"Try it," said Lall. "Pick up a dish in one hand, take the grip of the machine in the other. Now say, 'I am not holding the dish.'"

Naismith followed directions. Nothing happened.

"Now say, 'I am holding the dish.'"

Naismith repeated it after her. The oval bulb flared into pink, hot brightness.

"Now, this is all you have to do," Lall said breathlessly. "Put your hand on that grip and say to me, 'I hate the Lenlu Din.'"

Churan moved his hand slightly: in it was the control box of the automatic gun.

Naismith stiffened, aware that he had let the crisis find him unready. If he refused, he would be shot. If he took the test, and failed —.

Once more the images of those bright, bloated people drifted up to the surface of his mind. He examined his own feelings dispassionately. He neither hated nor loved them. To part of his mind they were utterly strange; to another part, they were familiar and almost commonplace. . . .

"Now, Mr. Naismith," said Lall sharply.

Naismith put his hand on the rounded mushroom-top of the grip. It was a shape that smoothly fitted his palm. He tensed his muscles, without hope—he knew he could not move fast enough to escape the gun. Because he could think of nothing else to do, he said, "I hate the Lenlu Din."

The oval bulb burned fiercely for a long moment, then slowly faded, glimmered, went out. Naismith heard Lall's and Churan's intake of breath, saw them relax and begin to move toward the table.

He stared blankly at the detector, thinking, *that's impossible!*

The staggering thing was that the aliens themselves showed no suspicion. As far as they were concerned, the detector test was obviously conclusive. Lall said briskly, "One more day here will be enough. You will put on the educator helmet once more—without tricks, this time, Mr. Naismith. Then it will take you some twelve hours to absorb all you have learned . . . the process is sometimes fatiguing, and it is important that you rest during that period. After that," she finished, "you will be ready to begin building your time vehicle."

Naismith looked at her sharply, but there was no humor in her expression. "Do you mean that literally?" he demanded. "I thought—"

"How else can we get you into the City?" she countered. "You may be positive they will check whatever story you tell. If you say you materialized in the factory city of Ul in the fifth century before the Founding, they will go there in their own time vehicle to see. Therefore, you must not only tell the story, you must actually be there, building that vehicle, when they come to look. It will take you a little over ten years."

"Ten years," said Naismith, stunned by the matter-of-factness in her tone.

"Understand this," she said harshly, leaning toward him. "It's that or nothing. Make up your mind."

Her glance was sullen. Churan, across the room, was looking at him with the same expression, his eyes hooded and dull.

Naismith shrugged. "What choice do I have?" He held out his hand. "Give me the helmet."

. . . Afterwards, he lay back in a soft chair, his mind a cloudy confusion of new thoughts and images, while the three aliens prepared a meal and ate it.

Naismith refused any food, and they did not urge him. The meal was quiet except for the shrill whines of the child, Yegga . . . until Lall suddenly sprang up with a gasp.

"What is it?" asked Churan, half rising, his eyes bulging with alarm. "What's the matter?"

"This bowl—" she said, staring at the table. "It had fruit paste in it, green, green as grass. Now look!"

Churan lifted the bowl. "Yellow." He dipped a finger, tasted. "Seafood. It tastes all right. You were mistaken."

"Fool!" she said shrilly. "I tell you I know what it was. I was watching—I *saw* it change!"

"A time flaw?" said Churan.

"It might have been you or me," she said, gripping her hands together. "That was too close, Gunda, I don't like it."

For a moment Churan seemed to have nothing to say. His face was pale under its greenish-brown tint; his eyes blinked slowly. At last, "It must have been just a local flaw,

Miko. It won't happen again."

"I say it was too close," Lall muttered again. The child, alarmed by its parents' fright, was squalling with its head back, its eyes squeezed shut. Lall cuffed it hard, then sat down. The child stared at her, gulping air, its features heavy and masklike. "Too close, Gunda," the woman repeated, trembling.

The two began to eat again, but with little appetite. After a few minutes they stopped and rose from the table. "We are going to bed now," Lall said dully to Naismith. "Your room is there. Till the morning, then."

They went into their room and closed the door. Naismith sat where he was for a while, then went to the room Lall had pointed out, examined the door controls. There was nothing unusual about them as far as he could determine; the door closed and opened again easily.

He went inside and lay down on the bed, half aware of his surroundings as the stream of memories, voices, faces came and went in his mind. When an hour had passed, he sat up. A thought came: With both Lall and Churan so alarmed about time flaws, neither would be anxious to use the time vehicle to check on his actions during the night.

He rose, opened the door and listened. There was no sound from the alien's room. He closed the door behind him and moved quiet-

ly across the lounge. Outside, he followed the red trail, heading directly for the place where Churan had found him a few hours ago.

He passed through the natatorium again, into the gymnasium . . . and stared with speculative interest at the pieces of equipment lying on the polished floor. Something had been prepared for him here: but what?

He moved closer, bent to examine the black case with the transparencies and dials. It was evidently the control box; three of the dials were calibrated and set. A fourth had only two positions, marked by a red dot and a white one. The pointer lay on the white dot.

Caution held him back, but Naismith had a sense that there were too many things still hidden in the background. Events were sweeping him on, and ignorance was still his most dangerous weakness. Certain risks had to be accepted.

He made up his mind. Kneeling, he turned the dial from white to red, then got to his feet and stepped back.

Not quickly enough.

The far end of the gymnasium darkened suddenly. Out of that blackness, like a vault opening where the far wall should have been, something stirred.

Fear entered the room. It came like a cold wind out of that darkness. Naismith's fingers were cold; his skin prickled. Straining his

eyes, he could make out a glint of light here, another there, as something impossibly huge came toward him in the blackness. Two little red eyes stared at him, and there was a faint rattle of bony plates. The head of the thing began to emerge into the light . . .
Zug!

Naismith forced himself to remain still as that immense body came fully into view. It was a shape of tremendous animal power, armored and clawed, many-limbed . . . but the most frightening thing about it, he thought with one corner of his brain, was the look of intelligence, of merciless, ancient wisdom in its eyes. . . .

With a bone-chilling roar, the thing sprang. In spite of himself, Naismith flinched back. The gigantic body swelled, filled the universe . . . and was gone. The darkness winked out. The gymnasium wall reappeared.

Naismith found himself trembling and covered with sweat. So *that* was the being he was supposed to kill! No wonder the Lenlu Din were afraid of it . . .

The far wall darkened again. With a sense of panic, Naismith realized that the experience was beginning once more. Again the stirring in the darkness, again the red eyes, the emergence: but this time the beast sprang more quickly. The lights came up; after a moment, the darkness fell a third

time . . . Grimly, Naismith watched the same terrifying bulk appear even more quickly, spring with less delay. A fourth time, and a fifth, he watched, before the lights came on and stayed on: the cycle was over.

And that, he thought bleakly, was probably only the beginning. The beast itself must move incomparably faster than that . . .

For the first time, doubt came. How could any one man kill a Zug?

He left the gymnasium and went into the corridor where Churan had found him before. Almost absent-mindedly, he glanced around. His attention sharpened, as he thought again of the anomaly of Churan's finding him just *here*. Why not in the gymnasium itself? Why in the corridor outside?

A little farther down the corridor there was an open doorway. Naismith remembered glancing in before, and finding only a small, uninteresting room. He went over to it, looked in again. It was as he recalled it, a tiny green room, hardly larger than a closet.

He stood in the doorway, frowning. There was a small bare desk, the same green as the walls, a simple-looking vision instrument over it, and an array of green and white panels on the wall behind.

The little room might have been a storeroom of some kind: but it was the wrong size. Either it should have been much bigger, Naismith

thought, or else there should have been no desk, no vision apparatus. In sudden excitement, he rounded the desk, began to fumble at the control strips of the panels. This might, just might be the purser's office, with all the records of the voyage . . . But it was not. It was the dispensary.

The wall panels held rack on rack of drugs in cylindrical bottles, each elaborately labeled. Probably most of them were worthless by now. Naismith examined a few, put them back. He tried another section of the wall.

Inside were gleaming, ranked strips of metal, each labeled with a name and a date. Naismith touched one experimentally, and it tilted out into his hand, a metal-bound sheaf of papers.

It was the case-history of a passenger aboard the ship: the others were the same.

In five minutes the whole story lay under his hands. A virus carried by the green-skinned people had mutated; the new form attacked *homo sapiens*. The symptoms were fever, nausea and intense feelings of anxiety, followed by collapse and coma, then a slow recovery. Death ensued in only a small percentage of cases: but every recovered victim had suffered severe and irreparable brain damage. There were stereo pictures, from which Naismith averted his eyes: vacant faces, dull eyes, jaws hanging. . . .

The epidemic had broken out on the same day the ship left Earth. In the end, it must have been only the greenskins, immune to their own infection, who had been able to bring the ship back and land it safely with its cargo of mindless human beings. And all over Earth, the same tragedy . . .

Naismith could imagine the shambling aments who had been the luxury ship's passengers, wandering out onto the plain by ones and twos . . . out into a land where nothing waited for them but death by exposure and starvation . . .

Naismith closed the book slowly and put it back in its place.

He understood now why this was a so-called "dead period." Only a handful of immune human beings must have survived, along with the greenskins, to rebuild civilization slowly and painfully over the course of centuries. Yes, that explained many things. . . .

In the morning, both aliens were sullen and heavy-eyed; they spoke to each other in monosyllables, and to Naismith not at all. The child, Yegga, alternately screamed and whined.

After they had breakfasted, Lall and Churan seemed to come sluggishly to life. The woman began to dress in the same short robe she had worn yesterday, saying over her shoulder to Naismith, "Today you will train in the gymnasium—

there is some equipment there which will prepare you to hunt Zug."

"I know. I found it there."

She turned to look at him expressionlessly, then went on with her dressing. "Very well, that will save us time. You saw the Zug, then? What did you think of it?"

"Very impressive, but I don't see why it was necessary."

"You are to play the role of a Zug hunter," she said, fastening the robe around her waist. "If you should see one without preparation, you would betray yourself immediately."

"I see." Remembering the vision that had come to him that night in his Beverly Hills apartment, Naismith asked, "And the gun? What was that for?"

She turned with a questioning expression. Churan, who had just entered the lounge carrying the time vehicle, paused to listen. "Gun?" asked Lall.

"Yes, certainly," Naismith answered with a touch of impatience. "That night, in my bedroom. Tell me, just what would have happened if I had accepted that gun?"

The two aliens looked at each other. Churan opened his mouth to speak, but Lall said sharply, "Be still!" She turned to Naismith, fumbling in the pocket of her robe, and produced the black cylinder with which she had drawn on the tabletop before. She pushed bowls and plates aside, and rapidly

sketched a pistol recognizable as the one Naismith had seen, with its flowing lines and massive grip. Churan came to watch over her shoulder; there was something strained in his silent attention.

"Was it a gun like this?" she asked.

"Yes, of course."

She turned away indifferently, putting the cylinder back in her pocket. "It would have given you a compulsion to kill Zug," she said. "Only a precaution."

Churan was staring at her silently. "Well, are you ready?" she snapped at him. "Why do we have to wait—why can't we go?"

Churan shrugged, held up the machine in both hands. He touched the controls; the shadow-egg sprang into being around him. With a last quick glance to left and right, Lall herded the child inside, stood back for Naismith to enter, stepped in herself.

It was more crowded than ever in the shadow-egg, and the scent of the aliens' bodies was oppressively heavy. By their tense attitudes and their sidelong glances at him, Naismith could tell that his presence made them equally uneasy. Seated on the stool, Churan touched the controls, and they drifted up from the floor, across the lounge and into the corridor. Once more they followed the red line; blackness swallowed them as they passed through the mound, then they were in dazzling sunlight.

Suddenly, the contrast between the unpleasant closeness of the shadow-egg and that clean brightness outside was more than Naismith could stand.

"Wait," he said. "I want to get out."

"What?" Lall and Churan stared at him.

"Set me down there, on top of the mound," he said, pointing. "I want to breathe the fresh air for a minute."

Churan said impatiently, "We have no time to waste—you can breathe where you are." He put his hands on the controls, but Lall stopped him.

"After all, you want to practice using the ejector," she muttered. "What harm can it do? Set him down."

Churan grumbled, but in a moment the shadow-egg swung up along the steep slope, rose to the summit and hovered there, a few inches above the grass-tops.

Churan stared down at the machine in his lap, rubbing his squat fingers together and grunting. At last he said, "Miko, move back a little—take the child. Mr. Naismith, you stay where you are."

The woman and child crowded back beside Churan. Naismith waited tensely. Churan's fingers touched the controls again, and abruptly Naismith felt himself picked up, swung out away from the aliens. The shadow-egg had bulged outward; now it was like

two eggs, connected by a narrow tube of shadow. Then, without warning, the bulge vanished. Naismith was falling. . . .

He landed with a jar, arms out for balance. When he looked up, the shadow-egg was drifting off on a long slant down toward the base of the mound.

He stood looking around him, breathing thankfully deep. The greenish-yellow plain rolled away unbroken to the horizon. It was early, the sun low in the east, and the thick grasses around his legs were beaded with dew. The sun was warm, but the air had a bracing coolness. Naismith filled his lungs again and again; earth smells, green smells, scents of spring flowers.

He sat down and watched the great wrinkled sheet of cloud drift slowly toward the west. Down below, the shadow-egg still hovered over the plain, a hundred yards or so away. He could just make out Lall's and Churan's faces: they seemed close in conversation. Farther out, a flock of birds arose from the grass and settled again. Still farther away, Naismith saw a larger body moving through the grassy hummocks—a quadruped, too large for a deer; perhaps an elk. But there were no men. Not a thread of smoke; not a cloud of dust.

From this height, he could see the immense buried shape of the ship more plainly. The world

around him was peaceful and empty, as if waiting for another Creation.

Naismith thought of the blank thirty-one years of his life, and of his four years in California, now seen as futile and misunderstood; then of the tremendous distance he had traveled in the shadow-egg with Lall and Churan—over nine thousand years; and the Earth was still here with its seasons . . . He thought of the distance he had yet to go—"twenty thousand years, Mr. Naismith," Churan had said. And it seemed to him, as it had from the beginning, that there was a monstrous meaning hidden in all this. It was all around him, in the slow drift of the clouds across the sky, in the sense of the buried giant under his feet. For the first time, he felt less as if he were fighting a battle than as if he were engaged in a quest for Knowledge.

He stood up again. *Who am I?* he thought; and unexpectedly, his body began to tremble. Images floated up into awareness: he could see the corridors of the City, and the colorful, floating throngs of Lenlu Din—all clear but distant, like figures in a peepshow. He knew who the Shefthi were, and could even conjure up some of their faces . . . but there was no image of himself. Who and what was he? . . . that was what he had to find out.

He stared down at the shadow-egg. The two aliens were still talk-

ing together, but in a moment they glanced up. Naismith gestured. Churan raised his hand; then the shadow-egg began to drift nearer, growing larger as it swept up the side of the mound. There was some thing incongruous about the egg's absolute internal stillness as it moved—as if the egg itself were really fixed, in some transcendent dimension, while the world swam under it.

The thought ended as the shadow-egg came to rest, near enough to touch. The orifice opened. "Get in!" said Lall.

. . . Then he was inside, in the suffocating closeness of the shadow-egg, while the landscape receded beneath. They were rising, moving more and more swiftly northeastward; and Naismith saw that time outside was at a standstill: there was no movement of wind in the tall grasses below, and the clouds overhead were as solid and motionless as if painted on the sky.

"Where to now?" he asked.

The aliens glanced up but did not speak. Even the child, Yegga, was staring at him silently.

The earth became a blurred green ball, spinning massively below. The sense of motion was so powerful that Naismith had an impulse to brace himself against it. But when he closed his eyes, there was no feeling of movement at all.

When the earth's giddy motion

slowed, Naismith saw a glint of silver ahead, and realized that they must be approaching one of the Great Lakes, probably Lake Michigan. Now they were dropping close to the ground, skirting the rim of the lake . . . slowly, now, almost at a walking pace . . . The egg came to rest.

Churan's fingers touched the controls. Outside, day was abruptly replaced by night: then day again, like a sudden white blow. Night, day, night, blending now into a shivering grayness. Once more Naismith saw the sun arching over them like a fireball, and the ground below seemed to heave and then subside, while a mist of foliage came and went, came and went.

Abruptly, there were roads. They sprang into being as if die-stamped—real highways, criss-crossing the land. At the foot of the lake there was a blurred city, growing and changing too fast for Naismith to catch its outlines. There was an impression of mud-brown hovels, replaced instantly by taller, paler buildings; then skyscrapers were sprouting upward, glittering, like a sudden growth of crystals.

Now the growth stopped, fell back. In another moment the city was gone; the roads were gone: nothing was left but the bare earth and a scattering of tiny, cone-roofed structures.

"What's happened?" Naismith demanded.

"They went underground," Lall said tonelessly. "The city is still there." A breath of darkness crossed the sky; there were glints of fiery light in it, gone almost too quickly to see. "There was a war," she added.

"Here?" Churan asked.

"A little farther," the woman muttered.

Day again: night; day. And the shadow-egg was hovering, under a late-afternoon sky. It moved, drifting down toward the nearest of the cone-roofed objects. Naismith saw now that the thing was a ventilator.

The shadow-egg went on dropping. The ground came up around them like a tide of darkness, and Naismith held his breath instinctively as it mounted over their heads. There was an instant of stifling blackness, and then they were dropping down through a blue-green cavern . . . a vast place, acres of gigantic machines under a rock ceiling, illuminated by the eye-hurting glare of mercury vapor lights. The place was gigantic, throbbing with power . . . and empty.

Naismith looked around as the shadow-egg touched. "Where are all the people?"

"Dead," said Lall tensely. "There was a war. They are all dead." She moistened her lips. "Now let me give you your instructions. You realize that once we have dropped you here, you are on your own. When you were thrown

back in time, *this* is where you will say you landed. You will find here an unfinished time vehicle, the first crude prototype. You will complete it, following the plans you find beside it. Then you will go forward to the City. After you get through the Barrier, the rest is up to you." The shadow-egg was drifting down a wide corridor between gigantic machines.

"There it is," she said.

Naismith saw a clear space, some low work benches, and leaning against the wall, a thing that might have been the skeleton of a rocket-sled. It was a tapered bar of metal, six feet long, with two crosspieces. Controls were set into the upper crosspiece, and Naismith could imagine the rider lying on the shaft, feet on the lower crosspiece, hands gripping the upper one like handlebars. . . .

"That is the time machine?" he asked, half incredulously.

"No, not yet. It can be adapted as such. The inventors were trying to make a device for exploring the interior of the earth. They hoped in this way to escape the devastation which overtook them. But all they succeeded in doing was to neutralize matter. If you boarded the machine as it now is, you would simply fall through the Earth, and go on falling. The propulsive unit is not installed."

Naismith glanced around. Tools lay on the work-benches, among scattered papers, as if someone had

laid them aside only an hour ago. . . . He felt a touch of uneasiness. "What happened to them?" he asked.

"Killed in the first attack," Lall said emotionlessly. "That black cloud you saw, just before we stopped—that was the bombs."

"How—?" began Naismith. But already Lall was drawing the child back beside her; Churan's fingers were busy on the controls. Naismith felt himself lifted as the shadow-egg bulged again. Then he was dropped unceremoniously on the stone floor. The shadow-egg hovered a few feet away.

"One thing she forgot to tell you," said Churan, with an unpleasant smile. "The *second* attack is going to take place in just thirty seconds. That is the one that pulverizes this city to a depth of fifty meters."

It was like a pail-full of icy water in the face. Naismith found himself thinking with cold clarity, *Then the workers must have gone down to shelter. That's why there are no bodies.*

"But why?" he said, taking a step closer. His mind was ferociously concentrated on the shadow-egg: he must succeed in getting back in, somehow. . . .

"You should not have told us about the gun, Mr. Naismith," said Lall, watching him through narrowed eyes.

Realization struck him. The aliens had *not* sent the apparition

of the gun. Then there were others, who—

"Ten seconds," said Churan, glancing up from his controls.

"The lie detector—" said Naismith desperately.

"They know about you," replied Lall. "Therefore you are useless to us." Her face went hard and ugly. "The whole effort is wasted."

"Five seconds," added Churan. "Four. Three. . . ."

Naismith whirled. In one leap he reached the skeletal machine;

feet and hands were on the cross-piece. He found a lever under his fingers, pulled it over hard.

The world went grayish and unreal around him. As it toppled, the machine began to sink into the floor—falling, as if the stone floor and the earth beneath it were so much mist.

Once more, before the darkness closed over his head, the last things he saw were the triumphant smiles of the aliens.

(to be concluded next month)

Through Time And Space With Ferdinand Feghoot: LXVII

As a Jurist, Ferdinand Feghoot made his great reputation largely on Pigafetta's Planet, adjudicating the complex insurance cases which arose from the nature and habits of its inhabitants, who were merfolk. Especially celebrated was his decision when the most beautiful mermaid of all, the actress Dolphinia, tried to collect several million for a pregnancy which she said was an accident.

Arranging herself on the stand so that photographers would have a chance to get plenty of what, on her world, was called "fishcake," she smiled winningly up at Feghoot.

"Dolphinia, my dear," her lawyer began, "did you have any—hm-mm—relations with mermen during the period involved?"

Blushing prettily, she replied that she hadn't.

"How about Earthmen?" he asked.

"Certainly not."

Innumerable witnesses supported this statement, adding that she hadn't so much as been seen with a man, and her attorney dramatically rested his case, stating that the lack of opportunity proved her case absolutely.

"Not at all," ruled Ferdinand Feghoot. "You have shown conclusively that the plaintiff consorted with neither mermen nor men. But this does not prove that her pregnancy was an *accident*. On the contrary, I am forced to attribute it to an active cod."

—GRENDAL BRIARTON

See Feghoot advertisement in "F&SF Marketplace," page 128.

The name of TP Caravan, too long absent from Science Fiction, returns now on the byline of a rather intriguing story. Concerning its author, our thrall, Pettifogle submits the brief information that "Mr. Caravan is an extremely shy man. He is on the faculty of the College of the City of New York, and is an authority on 18th Century English literature. Once he was an aerial gunner, but now he's too fat." Herewith his account of a Johnsonian scholar in a Kafkaesque situation.

The Court Of Tartary

by TP Caravan

PROFESSOR DUNBAR BAWLED into the cowboy's ear, and the cowpoke slapped him across the rump with the end of his rope, shouting, "Git up, thar." And the professor bawled again and began to run.

Edward Harrison Dunbar, B.A., M.A., Ph.D., L.L.D., member of the Modern Language Association and authority on eighteenth century literature, was not prepared for the situation in which he found himself: it had never been mentioned by any of the writers of the Age of Reason.

Kafka, of course, had treated the subject, but Professor Dunbar seldom read anything written after 1798.

"Classic restraint and control," Professor Dunbar used to tell his

classes: "these are the essentials of the pure style."

Now he ran bellowing across the dusty plains of Texas.

"Pure English is the best English," he used to say. "Cleanse your speech of colloquialism. Put limits to your imagination, restrain your fancy, remain within the rules. Speak with clarity and precision."

And now he bawled at another cowboy and the cowboy flapped his hat and yipped at him. Professor Dunbar couldn't help it; his instincts sent him running wall-eyed back to the herd.

He had awakened this morning with a vague feeling that something was wrong. Something was, of course. He had been turned into a steer. But he had

always been a man who woke up easily and gradually, and as he lay in a gentle half-doze, waiting for the smell of coffee to tell him that breakfast was ready, he tried, without any anxiety, to account for the uneasy feeling. His most recently published paper, the one proving that Boswell was the true author of *Ossian*, had been attacked by several fools in the scholarly journals, but he had his refutation prepared: it wasn't that. The college magazine had been suspended again for another four years, but that happened after almost every issue: it wasn't that. His lectures for the rest of the term were fully set up: that was all right. His children weren't in trouble, his wife wasn't in debt, and he hadn't been too drunk at the faculty club for several months.

Smelling coffee at last, he decided that his uneasiness was just the aftermath of some forgotten dream, and he opened his eyes. He came to his feet with a bawl of amazement: he had been sleeping among cows.

His first thought was that this was some student prank. The undergraduate body became more ingenious and unbearable each year; in Professor Dunbar's ideal university, no student under sixty years old would ever be admitted. But even the most brilliant and sadistic freshman would be unable to . . .

His next thought was that he was insane, but he brushed that thought aside as easily as he brushed a fly from his back: he knew perfectly well that he wasn't insane. He wasn't insane because he was a scholar. He was a sane scholar, and he mentally recited the first eighteen verses of Gray's *Elegy* to prove it. But he was still surrounded by cows, and a dozen yards away a group of cowboys were drinking coffee out of thick china mugs.

His third thought was that this was a dream.

His fourth thought told him that he knew it wasn't a dream.

One of the cowboys rolled a cigarette, and Professor Dunbar's mind stopped its hysterical stuttering. He bawled out an appeal for help and started picking his way through the sleeping animals toward the men. Having spent his life in a university town, he was rather frightened by the nearness of the other steers. Roused by his bellowing, the rest of the herd came to its feet. They were all around him, nervous, bawling. He was frightened enough by his predicament, and his fear spread to them and theirs to him. Frantic, he tried to push his way through the herd. His eyes rolled, his tail lashed out, his voice rose in terror.

Professor Dunbar was spooked.

The herd stampeded; he stampeded with it. He got one foot

into the bucket full of hot coffee and he got a hat flapped in his face and somebody shot a gun off behind his back and a thunderclap of panic burst within his head.

He ran and he ran until he couldn't run any more, and even then he kept on running. And even as he ran he wondered if he couldn't prove that Edward Young was the true author of the third book of *Gulliver's Travels*, because he knew that if he stopped thinking scholarly thoughts about the eighteenth century he would have to admit that he had turned into an animal. So as he ran he considered the evidence turned up by the publication of the Tickell papers and the discovery of Swift's old laundry lists and *Night Thoughts* and the graveyard poets and Gray's *Elegy* and the lowing herd winds slowly o'er the lea, and he had to admit that he was an animal.

He thought he was a cow because he had always thought of herds as made up of cows: actually, not that it made any difference, he was a steer.

And then somebody on a horse was running alongside of him, pressing him in, slowing him down, calming him, turning him in a circle. Finally he was milling with the other steers, slowly going round and round on the dusty plains, and then the whole

herd was moving peacefully back across the ground over which they had stampeded. Professor Dunbar was ashamed of himself. A scholar is a man who is trained carefully to consider every aspect of the most vexing question, and then to deliver a dispassionate answer; and here he had run away in terror from a puzzling situation, run away bellowing like an undergraduate. Not only that, he had led the whole valuable herd with him, and the exercise had no doubt run at least three pounds off each animal. Estimating the herd at—he tossed his head up to look—at about a thousand cows, that was three thousand pounds: at a dollar a pound he had cost the owner of the herd about three thousand dollars. He was a professor: three thousand dollars was almost an inconceivable sum to him.

A dollar a pound! For meat! A cow wasn't meat until it was slaughtered! They kill cows and eat them! Horror leaped upon his back like a swarm of wasps.

This time the stampede didn't last more than a few minutes: the animals were nearly exhausted.

Panting and snorting, Professor Dunbar took stock of the situation. Blind panic was certainly not the answer. First and most important, he had to let these cowboys know who he was; after

that he had to find some way of returning to his university. Perhaps some of the people in the biology department, with their cyclotrons and atoms and things could return him to his normal shape: he knew no more about biology than most biologists knew about eighteenth century periodical literature. Or perhaps the faculty of comparative religion would be the people to consult . . . but first he had to tell these cowboys. He slowly made his way to the edge of the herd and trotted up to one of the men on horseback.

Professor Dunbar bawled into the cowboy's ear, and the cowboy slapped him across the rump with the end of his rope, shouting, "Git up, thar." And the professor bawled again and began to run. Couldn't they see? What was the matter with them? And now he bellowed at another cowboy and the cowboy flapped his hat and yipped at him. Professor Dunbar couldn't help it; his instincts sent him running wall-eyed back to the herd.

He was an intelligent man, and he knew how to think directly to the point of a problem. "Sir, if a man find himself set down in the court of Tartary, he can make himself understood, if but his mind be put in order." He reminded himself of this comfortable eighteenth century doctrine as he snorted up the thick

Texas dust, forgetting the reply to this dogmatic statement: "The Cham of Tartary is a fool, Sir, and passes his days conglobulated with concubines. Sir, no gentleman will ever make himself understood to a Tartar, a North Briton, or any other gaudy barbarian." And so this steer, pacing slowly with the herd, began to put his mind in order. There was no point in approaching his difficulty through the scientific method: he knew no science. There was no help for him in metaphysics: he had cleared his mind of Kant. Nor could the classics aid him: he had read Ovid, of course, and the *Golden Ass*, but he didn't see how they bore on his problem. And—he hated to admit it—nobody in the eighteenth century seemed to have wondered what would happen to a scholar who woke up and found himself a cow. All right. That left only his own experience to fall back on. But, being a professor, he had never had any experiences.

It was too bad.

But wait—he had once marked a paper in which some student had treated the problem of communicating with intelligent life on other planets. (He had turned the paper over to the dean, with the recommendation that the student be disciplined.) What conclusion had the paper reached? He tossed his head and

bawled in the effort to remember. Mathematics. Yes. Mathematical laws would be the same everywhere, and everyone would recognize them. He was safe: all he had to do was display his knowledge of mathematics.

The herd was slowing down now, coming to a stop beside a railroad embankment. A slowly creaking windmill pumped water into a long ditch. But did he know any mathematics? He drank thirstily; stampeding was dry work. Isaac Newton, of course, and the law of gravity. But what was the law of gravity? How did it go? He had seen it once. Another steer shoved him away from the water.

$$E=mc^2.$$

Somehow that didn't look right. It didn't have the true Newtonian swing to it. And hadn't somebody, some modern fellow, come along and abolished gravity? Sadly he shook his head. There was no stability in the world today. He bellowed in despair.

Was that a train whistle? Chicago. The stockyards. The knacker's hammer. Death. We use everything but the squeal—but that was pigs. How much beef had he eaten during his life? How much cowhide in his wallets and suitcases?

Fear jogged his brain. He had studied mathematics once as an undergraduate, but it had been

math for students taking the liberal arts course, and nobody had paid any attention to it. Still, he must remember something. After all, he had taken the course three times before he had managed to sit behind somebody who was able to do the work when the exams came around. Wasn't there something about triangles?

It was a train whistle, no doubt about it. He could see the white puff of steam down the track.

Yes! You draw a triangle with little boxes on the sides. That means something in mathematics. He was saved! Quickly he jostled his way through the herd, meekly he approached the cowboys. He must remember to be gentle so they wouldn't be afraid of him. He bobbed his head. He tried to smile ingratiatingly.

With his right fore hoof he scraped out an awkward triangle. It was difficult to coordinate; he found his leg wouldn't move easily in the patterns he wanted. Finally, however, he finished and looked up, breathing heavily. Nobody had even noticed him.

He tried to nudge one of the cowboys gently, but he had forgotten his horns. With a shrill yip, the man flung his ten gallon hat into the professor's face. Confused and frightened, he dashed back to the herd. There was an odd feeling of safety in being with the others, and he grazed almost contentedly on the tram-

pled grass. Soon somebody would see his diagrams and realize what had happened.

He moved slowly with the rest of the herd, feeling the warm sun beat down through the dust on his back. Now and then he whisked away a fly with his tail. In just a little while he would be saved, but now he let a pleasant lassitude fill him, the way it did when he used to browse slowly among the books in the cool darkness of the more remote stacks in the university library, back in the eighteenth century section where even the graduate students seldom wandered unless they were lost. He munched slowly on the grass in front of him. Sleepily he wondered if Swift had really been deaf, or had he just been pretending? Dreamily he chewed his cud. If he could get a grant he'd go to England next summer and hunt around for papers to prove his theory that Sir Robert Walpole was the true author of the *Beggar's Opera*. He moved a little faster as the herd became restless.

Suddenly there was a high wooden fence in front of him. He brushed along it, hemmed in by the other cattle. What was happening? Throwing his head back, he bawled in bewilderment. Then there was a fence on both sides of him, wood under his feet. Up a narrow ramp. What? He was being loaded into a cattle car.

The ramp drummed hollowly as he trotted up it.

He wouldn't! He wouldn't go! Where were the people who were going to save him by mathematics? Stopping on the ramp, he looked back: the herd stretched out behind him. They had trampled over his careful diagrams. He bellowed in protest. A cowboy was leaning over the side of the fence, reaching toward him with a stick. Professor Dunbar leaped forward in uncontrollable anguish: he hadn't expected an electric shock. The door of the cattle car slammed shut behind him. He was crowded in, almost unable to move. He stamped his hoofs and bawled as loudly as he could, and all the other steers bawled with him; the noise of the protesting herd rose above the rumble of the wheels all the way from Texas to Chicago.

Chicago! There was a university in Chicago! There would be scholars. Deans, full professors, associate professors, assistant professors, tutors, instructors, readers, lecturers, graduate assistants, fellows: all sorts and conditions of men.

There it was now. He looked up at the tall buildings. His heart leaped up as he beheld Chicago in the sky. The train clanked and grumbled its way into the stockyards. Here? He had vaguely supposed they would lead the cattle down the main street be-

tween the station and the packing houses. He looked anxiously out over the cattle-pens. No scholars here. Not even a sophomore. Not even a football player. Only innumerable small fenced-off pens and a series of tall buildings from which—he shuddered—came the bawling of frightened cattle and the faint stink of death.

The doors slid open: he was shoved down an incline as the cattle rushed out of the car. Into a pen. Quick! Quick! He had to get away. He pawed the ground and bellowed. It did no good: all the cattle were pawing the ground and bellowing. Quick! Someone opened the gate of the pen. He was forced out into a runway. So soon? Where were they going? Single file, they trotted into one of the buildings. Up a ramp, another ramp, still another. He bellowed for help. Still higher. Cattle were screaming all around him.

And then they weren't going upward any more. The concrete floor clicked under his hoofs as he followed the steer in front. Bright electric lights shone down. No more concrete now: he walked on sawdust mixed with blood. Thump! The steer he was

following collapsed; the floor tilted; the body slid away. A man with a sledge hammer stood above the runway, waiting for him to move forward.

This time no electric shocks were going to budge him. He braced himself firmly on three legs, then began to scrape at the floor with his hoof. No mathematics this time: he was going to write out his predicament. He was proud of his self-possession as he remembered to write backward and upside down so the man could read it clearly in the bloody sawdust:

I AM NOT A COW. I
AM PROFESSOR D U N B A R.
PLEASE DO NOT KILL ME.

And then he trotted forward to accept their apologies.

"How was work today, Eddie?" The paymaster shoved the voucher through the small window.

"OK. Nuttin new. I had another of them crazy animals, know what I mean? The kind that sort of dances in front of you afore you whack em." Laboriously he scrawled his X on the dotted line. "That's five so far this month."



BOOKS



THE WORLDS OF SCIENCE FICTION,
Robert P. Mills, ed., Dial, \$4.95

F&SF's former and Kindly Editor has another collection; what he did in this case was to pick his authors and have them pick a favorite story, each one—and explain why it was favored. They are Isaac Asimov ("The Ugly Little Boy"), Poul Anderson ("Night Piece"), Anthony Boucher ("The Quest For St. Aquin"), James Blish ("A Work Of Art"), Ray Bradbury ("A Mircle of Rare Device"), R. V. Cassill ("The War In The Air"), John Collier ("Evening Primrose"), Avram Davidson ("Now Let Us Sleep"), George P. Elliott ("Faq'"), Howard Fast ("The First Men"), Robert A. Heinlein ("All You Zombies—"), Damon Knight ("Babel II"), Walter M. Miller, Jr. ("Memento Homo"), Theodore Sturgeon ("Loneliness") and Mark Van Doren ("The Strange Girl"). Not a story, but as interesting as any, is Alfred Bester's "My Private World of Science Fiction": excerpts from his commonplace, or notebook, over a 20-year period. Ronald Clyne's jacket design is uninspired.

DRAGON BONES IN THE YELLOW EARTH, James and Irving Crump, Dodd, Mead, \$4.00

For thousands of years the Chinese had known that dragon bones, taken internally, were good for what ailed them—usually some discombooberation of the yang and yin, of course; the demand was constant and tremendous, but the supply never failed. It was not till the late 19th C. that anyone thought to ask, where in the *Hell* were all those dragon bones *coming* from?—and *what* in the *Hell* *were* they? Well, dear children, they were coming from the yellow earth country of western North China; and what they were, they were fossils. All the really good dragon bones had got used up, so the wily yokels supplying the market had been substituting everything from the scapulae of extinct bison to tortoise-shell. The latter, used in divination, were plundered from old tombs. And thus began Chinese paleontology and archaeology, culminating in the find of the teeth of "Peiping Man" on a drug-store shelf, just in time to keep them from making up a dose of

Carter's Little Liver Pills, Chinese style. That's *one* way of getting your calcium, I guess. Book is readable and unpretentious.

THE CASE OF JOHN DARRELL, MINISTER AND EXORCIST, Corinne Holt Rickert, University of Florida Press, \$2.

John Darrell was a clergyman of the Church of England in the latter part of the Elizabethan era, who went about accusing people of witchcraft, and "curing" their victims. In short, he anticipated Cotton Mather by almost a century, and I am sure you will be glad to learn that the Archbishop of York threw him into jail for exorcizing without a license; and there, in jail, he died. The matter, however, is not really all that simple. His trial was marked by as great abuses of the laws of evidence as was any witch-trial; there is abundant proof that at least one of the "witches" (a man: warlock, if you prefer) was no mere persecuted doddering ancient, but an unconscionable rogue in the prime of life who used his powers to reduce a great country family to illness, idiocy and terror. What, exactly, those powers were, remains yet to be determined. This book should be read by all interested in the phenomenology of witchcraft. It is one of the University of Florida Monographs, *Humanities* # 9.

FROM THE OCEAN, FROM THE STARS, Arthur C. Clarke, Harcourt, Brace, \$4.50

This is a bargain, comprising two novels—**THE CITY AND THE STARS**, and **THE DEEP RANGE**—and a collection of twenty-four short stories—**THE OTHER SIDE OF THE SKY**; in other words, an omnibus. Or, as I said before, a bargain. **THE CITY AND THE STARS** is about Alvin, who set out to find what lay outside the City in the future time when the City is all there is to man on earth. **THE DEEP RANGE** is about Walter, who might be termed a submarinaut. Macrocosm, microcosm, Mr. Clarke, with the complex simplicity of genius, deals with them all with equal facility—and deals well.

GOODBYE TO GUNPOWDER, Donald Barr Chidsey, Crown, \$3.95

A simple, illustrated, popularized history of the substance which "revolutionized the social structure of Western civilization," in its peaceful as well as its martial uses . . . I almost wrote "marital"—but that's quite another story. Informal and entertaining, gawd-helpus.

TWO NOVELS, Nathanael West, Noonday, \$1.65

THE DREAM LIFE OF BALSO SNELL is surrealistic or something.

A COOL MILLION is a social satire . . . I guess. West's reputation had been better left to rest on **MISS LONELYHEARTS** and **THE DAY OF THE LOCUSTS**. This stuff is icky.

THE MAN-IN-SPACE DICTIONARY, Martin Caidin, Dutton, \$6.95

I don't know if Mr. Caidin (" . . . on the Canaveral scene as a writer since the summer of 1950 and the first rocket ever launched from the Cape . . .") will be regarded as the Samuel Johnson or Noah Webster of the Age of Space; but those lexicographers at least had predecessors, whereas if Mr. Caidin has it has escaped my attention—no very difficult feat. Anyway, here are "1900 terms important to the science and technology of manned space flight [and] over 200 . . . photographs and line drawings." It starts with *ABERRATION, The apparent displacement of the position of a particular celestial body due to the speed of the observer*, and ends with **ZULU**, *Reference to a time reading that is based on Greenwich Mean Time (GMT)*. *All manned flight and unmanned satellite operations are co-ordinated according to Zulu Time*. It isn't aimed at technicians, which means that the rest of us can understand it. Useful to readers and writers of Science Fiction alike. Fred L. Wolff's jacket design isn't bad.

THE CASTLE OF OTRANTO, Horace Walpole, Collier Books, 65¢

Here it is in paperback, the *original* Original Gothick Novel, fore- and founding-father of them all, from *Frankenstein* to *Titus Groan*. Horace Walpole was a rich, eccentric, kindly, fagotty Englishman who lived in a quaint country house, wrote about eight million gossipy letters, a number of still-unprintable short stories—and this. He had—says U. of C. Professor Marvin Mudrick in the New Introduction—"a taste for freaks and marvels, disorder and the abyss of unknowing." It is the story of Manfred, Prince of Otranto, and of the Horror(s) which befell his Castle at the time set for the nuptials of his sickly son Conrad to the beautiful Isabella. Gigantic figures in armor, raw head and bloody bones, clinks, clanks, creaks, shrieks—in short, the whole chamber of grue and gore which set off, *miseracordia*, the Romantic Revival. Strictly a curiosity, boys and girls, plus the Old Introduction by Sir Walter Scott. Tom Daly's cover design is first rate.

THE LONG WINTER, John Christopher, Crest-Fawcett, 50¢

Whatever became of the two-bit paperback?

It has been said, though I forget by whom, that there is a kind of Science Fiction done particularly well by the British, which consists of taking ordinary people engaged at ordinary tasks and showing the effects upon them of untoward (or stfnal) events—effects increasing until the ordinariness of everything is utterly destroyed. In these fifty-three words I have but ill rephrased an originally terse statement which I believe correct. The old master who showed how to do it was, of course, H. G. Wells, in *The War of the Worlds*. Two good modern examples are John Wyndham's *The Day of the Triffids* and John Christopher's *No Blade of Grass*. The "events" of the former were two-fold and complex—an invasion by intelligent, mobile, and deadly plants at a time when most of mankind has gone blind. The "events" of the latter were brutal, simple, elemental—all the grass (including grain) dies. In *THE LONG WINTER* Mr. C. tries it again—everything gets colder. This time, alas, it doesn't work. I think it's easy to see why. Instead of taking us, scene by scene, down the thermometer while the bitter sky freezes, he goes galloping off on a Modern Novel bit about adultery, telescoping the return of the Ice Age in order to give us some very British stuff about bed-hopping

and sherry. *Then*—as if that weren't enough—off we pop to Africa to observe the social upheaval caused by an influx of suddenly poor Whites into the suddenly omnipotent Black republics. Mr. Christopher does it all very well, mind you . . . but he really shouldn't have done it at all; not at all that length, anyway.

The latter part of the book, covering an attempt by the Central Africans to take over Frozen England, is no more effective than the rest of it. The author has already lost control of his story and cannot regain it. The loss is ours no less than his. Too bad, too bad, too bad.

FANTASTIC STORIES, Abram Tertz, Pantheon, \$3.95

"Abram Tertz" is said to be a pseudonym, and his books to be smuggled out of Russia. I wonder why. He says little against Communism which might not be said with equal justice against the governance of our own Great Republic. Perhaps the Russians fear to let us see how really like to us they are. Anyway, it is a damned fine book. I don't care for the "Kafkaesque" tale, and the author doesn't mention his name—perhaps has never seen Kafka's writings. Whom does he mention? ". . . a phantasmagoric art, with hypotheses instead

of a purpose . . . the fantastic imagery of Hoffman and Dostoyevsky, of Goya, Chagall, and Mayakovsky . . . [may] teach us how to be truthful with the aid of the absurd and the fantastic." I wonder why he didn't mention Gogol, whose spirit seems wonderfully alive on many of these pages. The story *You and I* treats in part a paranoïd, but is not all that simple (*simple?* God help us!); and soon gives us a multiple-and-simultaneous view of a delusion, which defies definition but is marvelous in its effect. *The Icicle* is the story of a man who finds he can predict future events, a talent which naturally does him no good whatsoever . . . nor the Soviet government. Utterly convincing. Infinitely moving. In *At The Circus* the element of Fantasy is more subdued, the "devilish manipulator" is real enough to be killed, but *his* death does not end the circus-obsession of the happy half-wit, Konstantin. And the Fantasy in *Graphomaniacs* seems all too real: the predicament of compulsive writers in a country where nothing can get published, not even for vanity, save by government consent . . . a predicament, we realize with a kind of sick thud, which is precisely that of "Abram Tertz." Poor devil of a stifled genius, here in a country rife with other tyrannies

we can at least read the marvels you have written.

THREE MARTIAN NOVELS (Thuvia, Maid of Mars, The Chessmen of Mars, The Master Mind of Mars), Edgar Rice Burroughs, Dover, \$1.75; **THE LAND THAT TIME FORGOT** and **THE MOON MAID**, Edgar Rice Burroughs, Dover, \$2.00

These latest items in the ERB freshet or flood or Revival follow the "quality paperback" format, and have some of the original illustrations by the late J. Allen St. John. Remember the race whose heads had shrivelled and the race which had shrivelled to nothing *but* head?—and how the latter enslaved the former, "riding" them from the neck up, as it were? You'll find them in the Mars trio; also (says the accompanying release) "A hidden city of dreamers who protect themselves by the mental creation of thousands of armed bowmen . . . [and] a strange city where chess is played with living men to the death for the possession of squares. **THE LAND THAT TIME FORGOT** doesn't belong to any of the "series"; it's a place where the individual goes through all the stages of evolution in one life-span. **THE MOON MAID**, I've already discussed.

PIRATES OF VENUS, THE CAVE GIRL, THE GODS OF MARS, TARZAN AT THE

EARTH'S CORE, PELLUCIDAR, THE LAND THAT TIME FORGOT, AT THE EARTH'S CORE, TANAR OF PELLUCIDAR, Canaveral Press, all \$2.95

These are all hardcover editions, and the eight volumes between them use five different illustrators—though not more than one per volume. *Pirates*, which is part of the Venus series inspired by Otis Adalbert Kline's imitation of ERB's Mars series, uses St. John's originals; Roy Krenkel, who draws in the St. John style, does *Cave Girl* (about a girl who lives in a cave); Larry Ivie illustrates *Gods* somewhat in the St. John manner,

but departs more into originality; and the same is true of Frank Frazetta in *Tarzan At The Earth's Core*. The other four are illustrated by Mahlon Blaine, who is of course unique. *At The Earth's Core*, *Tarzan At The Earth's Core*, *Pellucidar*, and *Tanar of Pellucidar* are part of the series whose (pre-Mohole) action takes place inside the Earth. There really seems no point in taking space from new works to review all of these after all this time, so I'll simply repeat what I said last time—ERB has faults to spare, but everyone should have read him.

—AVRAM DAVIDSON

PUBLICATION NOTED:

Asimov, Isaac. *The Man Who Upset The Universe* (Foundation and Empire). Ace. 40¢

Boucher, Anthony, ed. *Best From Fantasy & Science Fiction: 8th ser.* Ace. 40¢

Burroughs, Edgar Rice. *The Land That Time Forgot*, Ace, 40¢. *Tarzan and the Lion Man*, Ace, 40¢. *The Beasts of Tarzan*, Ballantine, 50¢. *Jungle Tales of Tarzan*. *The Return of Tarzan*. *The Son of Tarzan*. *Tarzan and the Ant Men*. *Tarzan and the Golden Lion*. *Tarzan and the Jewels of Opar*. *Tarzan of the Apes*. *Tarzan the Terrible*.

Tarzan the Untamed. (all Ballantine, 50¢)

Caidin, Martin. *Overture To Space*. Duell. \$5.50. Astronautics, (non-fiction)

Gold, H. L. *Mind Partner and 8 other novelettes from Galaxy*. Pocket Books, 35¢

Moskowitz, Sam, ed. anthology, with intro. by editor. *The Coming of The Robots, Explaining Other Worlds*. Collier, 95¢

Sudak, Eunice. X. adapted from screenplay by Rob't Dillon, Ray Russell, Lancer, 40¢

Thevenin, Rene. *The Earth and the Moon*. (problems of space travel) Walker, \$3.50

Somewhere, somewhere, far from Rome, and long, long ago, a Legionary inscribed upon a tombstone a simple inscription whose sincerity and sorrow has echoed down the ages. Ave Julia/Conjux Carissima Salve Ad Aeternitatem. The religion most popular among the Legions was of course, the cult and mystérie of Mithras Invictus, "the bright, unconquered, undying Sun," as the Avesta calls him. Here, in a poignant little story, Robert F. Young writes of a legionary of the near tomorrow and also of love, eternity, and the bright undying Sun.

The Eternal Lovers

by Robert F. Young

THEY MET ONE NIGHT OUTSIDE a little restaurant in New Canaveral, the small community that had sprung up on the outskirts of the newly-established civilian-operated space-exploratory base of the same name. She was coming out of the restaurant and he was going in, and when she slipped on a patch of ice in the entrance he caught her just in time to keep her from falling. She was so thin that a good strong wind could have blown her away, and her eyes were so large that they seemed to take up half of her face. Her hair was a splash of sunshine. He was tall and sandy-haired, and his eyes were gray, with little lights of loneliness in them.

It is one thing to find out how

two people happened to come together; it is quite another to find out what they said afterward. However, given a knowledge of their backgrounds and, even more important, a knowledge of what came later, it is possible to reconstruct their conversation with at least a reasonable degree of accuracy.

"Thank you," she said. Then, "I know you, don't I?"

He shook his head. "I don't believe we've ever met. I'm Clay Evans."

Her blue eyes brightened. "I remember now. I saw you at the base. You're the pilot of the *Selene I*."

"The pilot-to-be," he said. "'Passenger-to-be' would be a better term. All I have to do is

press a button, and then sit back and enjoy the ride. Will you have a cup of coffee with me?"

"Yes," she said. "My name is Janet Martin."

They went inside and sat at a table in the window and watched the March snow come down and the cars passing in the street, and after the waitress brought their coffee they talked and talked and talked. She told him about the minor secretarial position she held down at the base and about how homesick she was for the little town where she had been brought up, and he told her more about the forthcoming moon-orbit shot and about how he had dreamed of going to the stars ever since he was a boy. And she said, "You must be very brave, going out into space and not knowing for sure whether you'll ever come back."

"No," he said, "I'm scared. It's hard for me to sleep, and sometimes I wake up nights and lie there looking through the window at the stars and I keep thinking that soon I'll be a star myself—a little man-made one that people will listen to tape-recordings of over their radios and television sets; and after a while, when the *Selene II* joins me, a double-star heading for the moon."

It was common knowledge that space could not be endured alone for any length of time.

There were six psychotic pilots—four of them Russian and two of them American—to prove it. And two men in one spaceship was not the answer either; the Russians had already tried that. No, the answer lay in two ships traveling close together, each large enough to accommodate the pilot of the other should one of them break down. The psychological value of such a setup had long been recognized, but until recently it had been impossible to calculate orbits with sufficient precision to make such a shot practicable.

They sat there in the window, talking and looking into each other's eyes, till closing time; then they took a bus back to the base. They were already in love, so much so that their love wrapped them in an almost visible aura; certainly it came as no surprise to anyone when they announced early in April that they were going to be married.

The ceremony took place in the base-chapel on the day before the great event, and George Simmons, the pilot of the *Selene II*, was best man. Naturally it made good copy, and there were a score of reporters and photographers present. One of the latter caught the happy couple on the chapel-steps just as the first shower of rice descended on them. Looking at the photograph, one is somehow reminded of the lonely

little figurines in those hollow glass-paperweights that become filled with falling snow when they are shaken.

The great event made better copy yet. Reporters and photographers showed up in droves, and the three major networks had crews present to televise the launching live. Janet was there of course, and close-ups of her face ran a close second to close-ups of the ship. Clay did not appear on the scene till it was time for him to go on board, but the TV cameramen got an excellent shot of him climbing the gantry-ladder and another excellent one of him waving farewell to Janet just before he stepped into the lock. An hour later, perhaps forty million viewers saw the *Selene I* lift itself from its launching pad and hover for that mysterious and awe-inspiring moment before climbing into the sky. Then, through the same miracle of electronics, they were treated to a view of Janet's face. It was a classic close-up, and the single tear that ran down her cheek and turned to gold in the morning sunlight was as poignant as it was prophetic.

Three hours and four minutes later—just before the completion of the first pass—Clay's first words came over the New Canaveral receiver. They are a matter of record now. "Off course. Keep sister-ship grounded. Will miss

the moon by seventy thousand miles. Repeat: Off course. Keep sister-ship grounded. Will miss the moon by seventy thousand miles."

Will fall into the sun, he should have added. Repeat: *Will fall into the sun*.

Possibly he would have spoken the words—if it hadn't been for Janet. Certainly he knew that without the gravitic pull of the moon to alter his course, the last stage would be useless. But, as events proved later on, Janet knew too.

The *Selene I* was supposed to make three orbits, and the *Selene II* was supposed to blast-off and join it at the completion of the third. Then the moon-trajectory stages of both ships were supposed to ignite simultaneously and thrust the two sisters into space. Rendezvous was still possible, for the same launching calculations that had thrown the *Selene I* off course were integrated in the ganglion of the *Selene II*; but there was no point in sending a second man to his death. The launching was cancelled.

Nevertheless, the *Selene II* blasted precisely on schedule. George Simmons was as astonished as everyone else. Maybe even more astonished; after all, he should have been on it.

God alone knows how she

managed it, but manage it she did. Night was a factor certainly—and so was her being an employee on the base. Yet even when a hasty check was made of the personnel and she proved to be the only person missing, the others found it difficult to believe. But when her voice sounded over the base-receiver they had to believe.

Her first words are a matter of record too. They sounded just before rendezvous, just before the moon-trajectory stages of both ships ignited and sent the sisters hurtling into space: "Darling, I couldn't let you go alone."

Their voices were audible for a long time. Amateur radio-operators the world over picked them up. Networks had tape-recordings made of them. The world listened as it had never listened before.

When they were beyond the orbit of the moon Clay said, "Now that it's all over and nothing can be changed, I'm glad you

came. Neither of us will ever be lonely now."

"No," she said, "not ever."

And then, nearing the orbit of Venus: "Space is like a garden," Clay said.

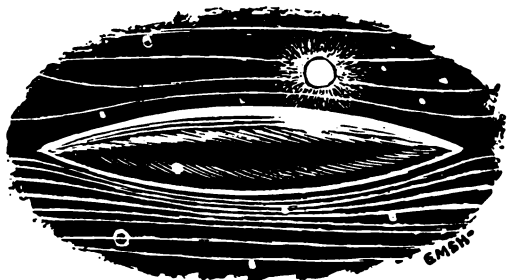
"Yes," she said, "a garden of stars. The blue ones are violets and the yellow ones are daffodils. That red one over there is a rose."

After their provisions gave out and hunger set in, there was a poetic phase. "Shall I compare thee to a summer's day?" Clay asked. "Thou art more lovely and more temperate; rough winds do shake the darling buds of May, and summer's lease hath all too short a date—"

"The face of all the world is changed, I think," she said, "'since first I heard the footsteps of thy soul . . .'"

But the most poignant words of all were the final words—the last travelers ever to find their way across the dark desert of the stars to the lonely oasis of earth—

"Darling, we'll be the sun!"



The subaltern came into the waitingroom at Whitehall. "Mr. . . . Pettifogle?" he inquired. Our ace agent rose to his feet. The subaltern smiled, briefly. "Major Sellers is serving with the British contingent, European Military Headquarters, at Fontainebleau in France. He has written for various British magazines; this will be his first appearance in the United States," the subaltern said. Pettifogle returned his salute, spun crisply upon his heel, and left. Some might consider Fontainebleau an unlikely source for this story of creator and creature, but Fontainebleau was once a school of art all to itself; and so is the art round which this witty story of terror, peril, hatred and identity is deftly woven.

PETE GETS HIS MAN

by J. P. Sellers

JON KRAMER STARED MOROSELY at his whisky standing on the bar of the Fleet Street public house. It was his fourth and he was wondering whether he should have one more or go home. He was trying to remember whether he had a bottle at home or whether he had finished it. He gave up trying to remember, ordered another whisky and asked Fred to sell him a bottle. It was better to be on the safe side. He could not face the night without a bottle.

He looked at his reflection in the mirror behind the bar and saw in it the face of a man much older than his forty-two years. His eyes were sunken and lined, his face

puffy and blotchy and his hair almost gone. It was Pete Kelly who had done it, he thought. Pete Kelly had put years on him.

Around him in the crowded bar buzzed the voices of his colleagues of the press. It was the hour when Fleet Street lets its hair down, when column writers have written their columns and are having one for the road, and when sub-editors are fortifying themselves against the next frantic hours before the newspapers are put to bed. The bar was a heavy mixture of corduroy and pinstripes, Stouts and Martinis, sport and politics.

As he gulped his whisky he felt a beefy hand thump him between

the shoulder blades and a tweedy, sarcastic voice say: "What's up, Jon? Waiting for Pete Kelly? Better be careful, old man. Pete Kelly always gets his man." The offensive voice collapsed into a bantering guffaw which was taken up by those around him until it seemed that all Fleet Street was drumming the words into his ears: "Pete Kelly. He always gets his man. Pete Kelly."

The words echoed and re-echoed through his head, adding their weight to the blood pounding in his ears. He felt the last vestige of control slipping away from him. He clung on desperately then, with a sudden movement, swept his glass from the bar and glowered at the blurred faces of his tormentors in the mirror. He shouted: "Damn you. Damn you all. And damn Pete Kelly." Then he pressed his way through the crowd and through the uneasy silence which his sudden, savage outburst had provoked.

But before he reached the door, the voice jeered again: "Be careful, Jon. He might be waiting outside. Pete Kelly might be waiting." The jeer gave way to a snigger, then a laugh, then a wide, mocking roar which followed him through the door onto the pavement. He closed the door quickly behind him and the mockery was stifled like a radio suddenly turned down. He leant against the wall, perspiring and trembling. The

weight of the whisky bottle in his pocket reminded him that he needed a drink. God, how he needed it.

Dusk was darkening the city skies. Fleet Street was resting. Soon it would be alerted by the busy rumble of the presses, among them those of his own paper, the *Daily Sun*. And the strip cartoon on the back page of that night's edition would regale its readers, as it had done for the last thirteen years, with the epic of Pete (Gets His Man) Kelly, the most famous, the most handsome and the most fearless detective in the world. His own creation.

Damn Pete Kelly. As he walked towards his parked car the tack of his anger was changing. It wasn't their fault, those ignorant half wits in the pub. It was Pete Kelly's. He was the cause of all his troubles, his sleepless nights and whisky drinking. He must put an end to it. He would fix Pete Kelly one day.

But when? He had been saying that for weeks and months. But still Pete Kelly churned his way into the *Daily Sun* each day, his exploits becoming braver and braver and his ego more and more inflated. But he would put an end to it. One of these days.

Darkness had fallen and a slender mist was edging from the river as he climbed the shoddy stairs to his small bed-sitter in Pimlico. It was three years since he had known

what it was to come home to the warmth and comfort of a family. Pete Kelly had driven them away. "Choose between me and Pete Kelly," his wife had said time and time again, and one night he had come home and found her and the children gone.

He looked round the bare, untidy room. A miscellany of bottles, mostly empty, littered the sideboard and his bed was unmade since the char's last weekly visit. He closed the door behind him and locked it to keep Pete Kelly out. Then he splashed a whisky into a greasy glass, gulped it down and poured another before taking off his coat and slumping into an armchair.

He thought about the early days of his association with Pete Kelly and of the fun they had had together. He remembered some of their earlier exploits. How he had planned the downfall of the Riverdale Boys; how he had guided Pete out of the clutches of the Ludenstein Horror. Yes, guided. That was the word. He had been in charge then and Pete had followed, brilliant but obedient.

But now it was different. God, how things had changed. It was Pete who did the leading and he had to follow. But one of these days he would put an end to it. He would kill Pete Kelly off and make a clean break.

He walked tiredly across the room to his drawing board, turned

on the lamp and took up his pencil. He thought for some minutes then his pencil flickered across the paper. A sleek two-seater car sped along a narrow, country lane. The handsome, impeccably dressed young man at the wheel drove with skilled nonchalance, one hand on the wheel and the other firing a pistol expertly at the large, black sedan which pursued him. Whilst doing all this, he still found it possible to light a cigarette, look at his watch and smile sardonically.

He put down his pencil, raised his head from the drawing board and critically surveyed the picture he had drawn. Then, with a flourish, he drew a large balloon above Pete's head and considered what to write in it. What should he put? It must be something slick, something greasy with suspense to lubricate the reader's imagination over the weekend.

He closed his eyes and hung suspended for a moment inside the image he had created. He was sitting in the car, the countryside sweet in his nostrils and the wind keen in his ears. The fierce blood of Pete Kelly surged through his veins and he thrilled at the excitement of the chase. Then a harsh, clipped voice destroyed the image and jolted him back to his desk. It was the voice of Pete Kelly and it was impatient and imperious as usual.

"Come on. Get on with it. The level crossing gates, you fool.

They're closed. Get it written and get it over with for goodness sake."

He froze in misery. It was always like this. Whenever he was on the verge of sharing Pete Kelly's adventures, he came and spoilt it. For a moment, rebellion sparked in him. Then it faded, and obediently he wrote the caption: "The level crossing gates. They're closed!" He crossed to the sideboard and poured another whisky. "Now get yourself out of that, Pete my boy," he muttered. But he was careful to keep his voice low and his back to the drawing board as he spoke.

Before going to bed he stood, glass in hand, looking down at the drawing. Then he covered it with the heavy blotter which he always kept handy for the purpose. He used it to keep the voices out.

It was about three years ago, he remembered, as he fumbled with the knotted bedclothes, that the voices had first come. He had woken in the middle of the night, aroused by a confused hum which seemed to come through the open window. He had got up and closed the window but the hum persisted. He turned on the light and then realized with horror that the noise was coming from the drawing board. It was as if a silent film had suddenly begot sound. He stood for a moment, rooted and dismayed. Then he covered the picture with the first thing which came to hand, the

blotter, and the sound disappeared as it does when a heavy door is closed on a crowded room. The experience had left him anxious and deeply stirred. He felt his life expanding into a new dimension and the feeling thrilled but troubled him.

For some nights afterwards he had been careful to cover his drawing before going to bed. But one night, when fear had been overtaken by curiosity, he left the drawing uncovered. And that night he had heard, for the first time, the voice of his creation.

"Help me, help me," it cried.

He leapt from his bed, turned on the light and looked at the writhing figure gripped in the tentacles of the Ludenstein Horror. The eyes had lost the calm aplomb he had drawn into them earlier that evening. Instead they were wide in terror and the face was contorted in agony. He cried again. "Help me. Jon, help me."

He had spoken his name! He needed his help! His fingers fumbled for his pencil and feverishly raced across the paper. A sharp dagger appeared in the detective's hand which with a firm upward thrust, plunged it into the monster's heart. It subsided, lifeless, and Pete Kelly scrambled away to safety. Then there was silence. No word of thanks, no acknowledgment even. Just silence.

But Pete Kelly had not always been so ungrateful. He remem-

bered the day when a bottle of whisky had been delivered to his flat with the message: "To Jon from Pete, with gratitude." It had taken all his self control to keep the exciting news from his colleagues in the office the next day. But they had obviously guessed that something was up judging from the enquiring looks they had given him. But he had not told them. They would not have understood.

The night passed fitfully but he was out of bed promptly at eight o'clock. He mustn't be late for his daily briefing with Pete, conducted through the medium of his shaving mirror.

"Now then, Pete, what have we got on today?" he asked, brisk and business-like. He liked the word 'we'. He liked to feel that he and Pete were a team. Not forgetting, of course, Pete's devoted servant Carl, ex-boxer, ex-crook, ex-everything that could possibly be of use to Pete (Gets His Man) Kelly.

"Miami. Eleven o'clock London Airport. Following The Captain." Pete always spoke economically, not a word wasted.

Ah yes, The Captain, the leader of the Stepney gang as every reader of the *Daily Sun* except the moronic had already guessed. "You mustn't be late, Pete," he said. "I suppose Carl is laid on with the Merc?"

He got no answer to this elementary question. But he was

only stalling for time, waiting to ask the question that really mattered.

"Pete . . . Can I come with you?" If only he could. He was fully prepared, right down to the shoulder holster and automatic hanging on the peg in the wardrobe. All it needed was for Pete to say the word.

"Certainly not. Nothing you can do. Goodbye. Things to do." The usual answer. He shrugged his shoulders. He was accustomed and cushioned now to disappointments like this. But he wanted so much to join Pete one day and give a hand. He was sure he could be of use.

The day followed its usual course. A few drinks before lunch and then no appetite to eat it. A desultory afternoon in the office then back to his flat on his strip.

He looked again at the drawing he had done the day before, and added a few leisurely, final touches. He felt less tense than usual. He had not even bothered to lock his door. Pete Kelly could scarcely try to visit him tonight. He was on his way to Miami and could not be back before Thursday.

"Not finished yet? How slow you are."

The familiar, arrogant voice floated across the room from the armchair.

"Came for a chat. Snap out of it. Haven't got all day." There was no mistaking the voice nor the

elegant, immaculate trouser legs which protruded from the arm chair. The lithe figure sprang up and walked towards him. Despite his anger, he could not help noting with professional pride the easy, athletic way he carried his superb, well-proportioned body.

"I thought you were on your way to Miami." His voice was lame and inadequate as it always was when he came face to face with his creation.

Pete Kelly towered over him. "I was," he said. "Changed my mind. Madness to chase The Captain to Miami. Better ways of doing it. Anyway, more important things in London. Riverdale Boys on the warpath again."

"The Riverdale Boys? But they haven't been in the strip for ages. Not since October. You got them sent up for ten years, or had you forgotten?" It was nice to catcho Pete out once in a while.

"Laddie, laddie," the voice patronised patiently. "They've escaped. They're after me."

Indignation choked him. "But they can't have escaped. It wasn't planned. It's me who controls the Riverdale Boys, and the Stepney gang and the Ludenstein Horror. And you, Pete Kelly. You can't do anything, any of you unless I make you." He sank back in his chair and passed a despairing hand over his brow. "I wish I had never created you."

It was always the same, nowa-

days, when Pete Kelly turned up unexpectedly. He always had a spanner to put in the works, some unreasonable request or peremptory instruction.

But it had not always been so. His early visits had been most deferential, almost obsequious. "Do you think I could have a new car?" had been his first request. Very reasonable. His old one had done nearly thirty thousand miles, and the readers had welcomed the change. But, gradually, the requests had become less reasonable. "A little less of those unpleasant midnight dips in the Atlantic, if you don't mind. Damned cold, I'll tell you. Not at all the way a gentleman behaves. Just attend to it, will you?"

But this was the last straw. Getting the Riverdale Boys out of prison without his knowledge, let alone his permission. "He's getting out of control. I've got to put an end to it," he told himself.

Pete's voice broke in on his thoughts. "By the way, I want to move to another flat. Can't stand those insufferable neighbours of mine a moment longer." He stifled a bored yawn, his lace handkerchief absently brushing his aristocratic nose.

"Move," he cried in alarm. "But you can't move. Why, your Mayfair flat is as much a part of you as Sherlock Holmes' place in Baker Street. The readers just wouldn't stand for it."

"A fig for the readers." The slender, elegant fingers snapped airily and lit a cigarette. Then he stiffened and listened intently to his two-way wrist radio. His body was calm and relaxed but Jon knew that the muscles inside the rugged, tanned frame were flexed ready to bring his body into instant, dynamic action if the need arose. He watched with reluctant admiration the alert grey eyes and the lips parted in excitement.

Pete spoke quietly into his radio. "Roger," he said. He looked up. "Just had the tip off. Riverdale Boys after me. They know I'm here. They have all the exits covered. They have booby-trapped the lift, electrified the handrails on the stairs and set up an invisible death ray in the corridors." He dismissed these trivialities with a thin smile, lit another cigarette and flicked a speck of dust from his sleeve. "Must be off now," he said. "Give you till Thursday to find me another flat." He got up and walked towards the window.

"Pete. Let me come with you. I could keep you covered."

"No thank you. This is man's work. See you tomorrow. Same place, usual time," he said and disappeared lightly through the window. The sound of squealing tyres broke the night air, then the crackle of machine gun fire and a bomb explosion in the lift shaft. But he knew that Pete was safe, speeding back to his flat.

His body drooped in relief. Whatever Pete had done to him he would hate to see him rubbed out by the Riverdale Boys.

But what was that Pete had said? Something about moving from his flat? He had been joking, surely. In fact he hadn't said it at all. He must have been dreaming. That was it; he had dozed off on his drawing board and had a bit of a nightmare. Pete couldn't possibly have been to see him. He was on his way to Miami.

But it had all been so vivid. He thought he could even detect the odour of the exclusive Turkish tobacco Pete smoked. He decided he had better keep the appointment the next day just in case. You never knew with Pete Kelly.

Their meeting place was the entrance to Charing Cross railway station. Pete had chosen it because of the crowds.

"Come on. Quickly now. We'll take the undergrounds to Cannon Street." The Blue Angel in Cannon Street was one of their operational headquarters.

The ticket collector looked at him in surprise. "You've given me two tickets, sir," he said.

Stupid oaf. He often had this trouble when he went out with Pete. "Of course I have. The other is for my friend." He saw the look of doubt in the ticket collector's eyes, then the dawn of understanding.

"Of course, sir. For you and

your friend." At least the wretched man had the goodness to look discomforted, as well he might when he recognized Pete.

They sat side by side in the train. He turned to Pete. "What shall we do when we've cleaned up the Stepney gang, Pete?"

The man opposite lowered his newspaper. "I beg your pardon," he said.

"I was addressing my friend."

"Oh, really. Sorry," he said, withdrawing behind his newspaper. But not before his face had reddened with pride at seeing Pete Kelly in the flesh, for the first time in his simple life, no doubt.

They left the train together and swept with the press of the crowd along the platform towards the exit. Pete Kelly said something to him which was lost against the hiss of the closing doors of the train.

"Sorry. What was that you said?"

Pete leant towards him and shouted: "I said, don't bother about finding me another flat. I've moved already. 42 Park Lane."

The devil he had! What a nerve! Moving without so much as a by-your-leave. The insult clamoured in his ears. The noise expanded in his head and fought against the clatter of the departing train. The hateful, leering face blurred his eyes and the catalogue of the indignities he had suffered in the past jostled in his

mind. He was consumed with the urge to grind Pete Kelly out of existence. He lunged at him to dash him under the accelerating wheels of the train. But he was not quick enough. Pete Kelly dodged deftly and disappeared into the crowd.

He collapsed onto the platform, spent with rage. He heard a voice say: "Poor old man. I expect he's had a turn."

Back in his flat he re-read the final paragraph of the letter he had written to his editor. So *I have decided to put an end to Pete Kelly. When the present series ends I'm going to kill him off. The Stepney gang will get him and there's an end to it.* He sealed the envelope and put it into his pocket. Then he slept more soundly than he had for months.

Soundly, but not for long. A dull thud woke him and an angry vibration troubled his ears. He cowered for a moment then got out of bed and switched on the light. The blotter was lying on the floor and Pete Kelly's eyes blazed lethally from the unmasked picture. The letter he had written to the editor stood on the drawing board, open and revealed.

There was no mistaking the revenge in the eyes nor the sound of the lithe, urgent footsteps climbing the stairs. Pete Kelly was coming to get him.

Then Pete Kelly must die.

His pencil hovered for a moment, quivering and uncertain.

Then it stroked the paper, gathering momentum as the footsteps reached the door.

"Open up. Open up, I say." The door handle rattled violently.

The pencil raced on and the picture came to life. The two seater crashed through the level crossing gates, the heavy locomotive bearing down on it.

"Open up, I say. Right then, I'll shoot the lock."

The pencil sped on. The body of Pete Kelly fell under the train and the towering wheel cleanly took his head off.

The door handle stopped rattling. There was mortal silence outside.

He rose in his chair and screamed in triumph at the body of the stricken hero. "This is your end, Pete Kelly. An end to your damned conceit and arrogance. Get out of that lot if you can." He

breathed deeply the heady air of his newly won freedom.

When he awoke the next morning he dressed carefully and fastidiously, running over in his mind his plans for the day. He had to be at London airport by eleven o'clock, he remembered, to fly to Miami. He would fix The Captain, this trip. He checked his automatic, fastened the strap of his shoulder holster and put on his coat. Before leaving the flat he looked at himself appraisingly in the mirror. "Handsome brute," he preened. "Come on. Work to do. Fix The Captain."

As he walked down the stairs, he met the postman who said: "Letter for you, Mr. Kramer."

"Kramer? Some mistake. Name's Kelly. Pete (Gets His Man) Kelly."

He walked into the street and stood on the pavement, waiting for Carl to bring round the Mercedes.

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Some few of our readers have mildly complained that they like Dr. Asimov's articles very much . . . but that "he uses too many numbers . . ." Ever-amiable, compliant almost to a fault, Dr. A. herewith obliges; an article with no numbers whatsoever—only names. Real classy ones, too.

ROLL CALL

by Isaac Asimov

WHEN ALL THE WORLD WAS YOUNG (AND I WAS A TEEN-AGER), one way to give a science fiction story a good title was to make use of the name of some heavenly body. Among my own first few stories, for instance, were such items as "Marooned Off Vesta," "Christmas on Ganymede," and "The Callistan Menace." (Real swinging titles, man!)

This has gone out of fashion, alas, but the fact remains that in the 1930's, a whole generation of fans grew up with the names of the bodies of the Solar system as familiar to them as those of baseball stars were to the little squares who didn't dig s.f. Ten to one we didn't know why the names were what they were, or how they came to be applied to the bodies of the Solar system or even, in some cases, how they were pronounced—but who cared? When a tentacled monster came from Umbriel or Io, how much more impressive that was than if it had merely come from Philadelphia.

What I intend to do, then, is to take up the matter of the names, call the roll of the Solar system in the order (more or less) in which the names were applied and see what sense can be made of them.

The *Earth* itself should come first, I suppose. Earth is an old Teu-

tonic word but it is one of the glories of the English language that we always turn to the classic tongues as well. The Greek word for Earth was "Gaia" or, in Latin spelling, "Gaea." This gives us "geography" ("earth-writing"), "geology" ("earth-discourse"), "geometry" ("earth-measure"), and so on.

The Latin word is "Terra." In science fiction stories, a human being from Earth may be an "Earthling" or an "Earthman" but he is frequently a "Terrestrial", while a creature from another world is almost invariably an "Extra-terrestrial."

The Romans also referred to the Earth as "Tellus Mater" ("Mother Earth" is what it means). The genitive form of "tellus" is "telluris" so Earthmen are occasionally referred to in s.f. stories as "Tellurians." There is also a chemical element "tellurium" named in honor of this version of the name of our planet.

But putting Earth to one side, the first two heavenly bodies to have been noticed were, undoubtedly and obviously, the *Sun* and the *Moon*, which, like Earth, are old Teutonic words.

To the Greeks, the Sun was "Helios" and to the Romans it was "Sol." For ourselves, Helios is almost gone, although we have "helium" as the name of an element originally found in the Sun, 'heliotrope' ("sunturn") for the sunflower, and so on.

Sol persists better. The common adjective derived from "sun" may be "sunny," but the scholarly one is "solar." We may speak of a sunny day and a sunny disposition, but never of the "Sunny system." It is always the "Solar system." In science fiction, the Sun is often spoken of as Sol, and the Earth may even be referred to as "Sol III."

The Greek word for the moon is "Selene" and the Latin word is "Luna." The first lingers on in the name of the chemical element "selenium" which was named for the Moon. And the study of the Moon's surface features may be called "selenography." The Latin name appears in the common adjective, however, so that one speaks of a "lunar crescent" or a "lunar eclipse." Also, because of the theory that exposure to the light of the full Moon drove men crazy ("moon-struck"), we obtained the word "lunatic."

Now I have a theory that the notion of naming the heavenly bodies after mythological characters did not originate with the Greeks; but that it was a deliberate piece of copy-cattishness.

To be sure, one speaks of "Helios" as the god of the Sun and "Gaea" as the goddess of the Earth, but it seems obvious to me that the words

came first, to express the physical objects, and that these were personified into gods and goddesses later on.

The later Greeks did, in fact, feel this lack of mythological character and tried to make Apollo the god of the Sun and Artemis (Diana, to the Romans) the goddess of the Moon. This may have taken hold of the Greek scholars but not of the ordinary folk, for whom Sun and Moon remained "Helios" and "Selene." Nevertheless, the influence of this Greek attempt on later scholars was such that no other important heavenly body was named for Apollo or for Artemis.

I would like to clinch this theory of mine, now, by taking up another heavenly body.

After the Sun and Moon, the next bodies to be recognized as important individual entities must surely have been the five bright stars whose positions with respect to the remaining stars were not fixed and which therefore, along with the Sun and the Moon, were called "planetes" ("wandering") by the Greeks. (We call them "planets.")

The brightest of these stars is the one we call Venus and it must have been the first one noticed,—but not necessarily as an individual. Venus sometimes appears in the evening after sunset, and sometimes in the morning before sunrise, depending on which part of its orbit it happens to occupy. It is therefore the "Evening Star" sometimes and the "Morning Star" at other times. To the early Greeks, these seemed two separate objects and each was given a name.

The Evening Star, which always appeared in the west near the setting sun, was named "Hesperos ("evening" or "west"). The equivalent Latin name was "Vesper." The Morning Star was named "Phosphoros" ("light-bringer") for when the Morning Star appeared, the Sun and its light were not far behind. (The chemical element, "phosphorus"—Latin spelling—was so named because it glowed in the dark as the result of slow combination with oxygen.) The Latin name for the Morning Star was "Lucifer," which also means "light-bringer."

Now notice that the Greeks made no use of mythology here. Their words for the Evening Star and Morning Star were logical, descriptive words. But then (during the 6th Century B.C.) the Greek scholar, Pythagoras of Samos, arrived back in the Greek world after his travels in Babylonia. He brought with him a skull-full of Babylonian notions.

At the time, Babylonian astronomy was well-developed and far in advance of the Greek bare beginnings. The Babylonian interest in astronomy was chiefly astrological in nature and so it seemed natural for them to equate the powerful planets with the powerful gods. (Since

both had power over human beings, why not?) Now the Babylonians knew that the Evening Star and the Morning Star were a single planet —after all, they never appeared on the same day; if one was present, the other was absent, and it was clear from their movements that the Morning Star passed the Sun and became the Evening Star and vice versa. Since the planet representing both was so bright and beautiful, the Babylonians very logically felt it appropriate to equate it with Ish-tar, their goddess of beauty and love.

Pythagoras brought back to Greece this Babylonian knowledge of the one-ness of the Evening and Morning Star and Hesperos and Phosphoros vanished from the heavens. Instead, the Babylonian system was copied and the planet was named for the Greek goddess of beauty and love, "Aphrodite." To the Romans, this was their corresponding goddess, *Venus* and so it is to us.

Thus, the habit of naming heavenly bodies for gods and goddesses was, it seems to me, deliberately copied from the Babylonians (and their predecessors) by the Greeks.

The name "Venus," by the way, represents a problem. Adjectives from these classical words have to be taken from the genitive case and the genitive form of "Venus" is "Veneris." (Hence, "venerable" for anything worth the respect paid by the Romans to the goddess; and because the Romans respected old age, "venerable" came to be applied to old men rather than young women.)

So we cannot speak of "Venusian atmosphere" or "Venutian atmosphere" as s.f. writers sometimes do. We must say "Venerian atmosphere." Unfortunately, this has uncomfortable associations and it is not used. We might turn back to the Greek name but the genitive form there is "Aphrodisiakos" and if we speak of the "Aphrodisiac atmosphere" I think we will give a false impression.

But something must be done. We are actually exploring the atmosphere of Venus by Venus-probe and some adjective is needed. Fortunately, there is a way out. The Venus cult was very prominent in early days in a small island south of Greece. It was called Kythera (Cythera in Latin spelling) so that Aphrodite was referred to, poetically as the "Cytherean goddess." Our poetic astronomers have therefore taken to speaking of the "Cytherean atmosphere."

The other four planets present no problem. The brightest planet, next to Venus, is truly the king-planet. Venus may be brighter but it is confined to the near neighborhood of the Sun and is never seen at midnight. The second brightest, however, can shine through all the hours

of night and so it should fittingly be named for the chief god. The Babylonians accordingly named it "Marduk." The Greeks followed suit and called it "Zeus" and the Romans named it *Jupiter*. The genitive form of Jupiter is "Jovis" so that we speak of the "Jovian satellites." A person born under the astrological influence of Jupiter is "jovial."

Then there is a reddish planet and red is obviously the color of blood; that is, of war and conflict. The Babylonians named this planet "Nergal" after their god of war, and the Greeks again followed suit by naming it "Ares" after theirs. Astronomers who study the surface features of the planet are therefore studying "areography." The Latins used their god of war, *Mars*, for the planet. The genitive form is "Martis" so we can speak of the "Martian canals."

The planet nearest the Sun, appears, like Venus, as both an evening star and morning star. Being smaller and less reflective than Venus, and closer to the Sun, it is much harder to see. By the time the Greeks got round to naming it, the mythological notion had taken hold. The evening star manifestation was named "Hermes" and the morning star one "Apollo."

The latter name is obvious enough, since the later Greeks associated Apollo with the Sun and by the time, the planet Apollo was in the sky the Sun was due very shortly. Because the planet was closer to the Sun than any other planet (though, of course, the Greeks did not know this was the reason), it moved more quickly against the stars than any object but the Moon. This made it resemble the wing-footed messenger of the gods, Hermes. But giving the planet two names was a matter of conservatism. With the Venus matter straightened out, Hermes/Apollo was quickly reduced to a single planet and Apollo was dropped. The Romans named it "Mercurius" which was their equivalent of Hermes and we call it *Mercury*. The quick journey of Mercury across the stars is like the lively behavior of droplets of quicksilver, which came to be called "mercury," too, and we know the type of personality that is described as "mercurial."

There is one planet left. This is the most slowly moving of all the planets known to the ancient Greeks (being the farthest from the Sun) and so they gave it the name of an ancient god, one who would be expected to move in grave and solemn steps. They called it "Cronos," the father of Zeus and ruler of the universe before the successful revolt of the Olympians under Zeus' leadership. The Romans gave it the name of a god they considered the equivalent of Cronos, and called it "Saturnus," which to us is *Saturn*. People born under Saturn are supposed to reflect its gravity and are "saturnine."

For two thousand years, the Earth, Sun, Moon, Mercury, Venus, Mars, Jupiter and Saturn remained the only known bodies of the Solar system. Then came 1610 and the Italian astronomer Galileo Galilei, who built himself a telescope and turned it on the heavens. In no time at all, he found four subsidiary objects circling the planet Jupiter. (The German astronomer, Johann Kepler, promptly named such subsidiary bodies "satellites" from the Latin word for the hangers-on of some powerful man.)

There was a question as to what to name the new bodies. The mythological names of the planets had hung on into the Christian era, but I imagine there must have been some natural hesitation about using heathen gods for new bodies. Galileo himself felt it wise to honor Cosimo Medici II, Grand Duke of Tuscany from whom he expected (and later received) a position and called them "*Sidera Medicea*" (the Medicean stars). Fortunately, this didn't stick. Nowadays, we call the four satellites the "Galilean satellites" as a group, but individually we use mythological names after all. A German astronomer, Simon Marius, gave them these names after having discovered the satellites one day after Galileo and they were finally accepted.

The names are all in honor of Jupiter's (Zeus's) loves, of which there were many. Working outward from Jupiter, the first is *Io*, (two syllables please, eye'oh), a maiden whom Zeus turned into a heifer to hide her from his wife's jealousy. The second is *Europa*, whom Zeus in the form of a bull abducted from the coast of Phoenicia in Asia and carried to Crete (which is how Europe received its name). The third is *Ganymede*, a young Trojan lad (well, the Greeks were liberal about such things) whom Zeus abducted by assuming the guise of an eagle. And the fourth is *Callisto*, a nymph whom Zeus's wife caught and turned into a bear.

As it happens, naming the third satellite for a male rather than for a female turned out to be appropriate, for Ganymede is the largest of the Galilean satellites and, indeed, is the largest of any satellite in the Solar system. (It is even larger than Mercury, the smallest planet.)

The naming of the Galilean satellites established once and for all the convention that bodies of the Solar system were to be named mythologically and, except in highly unusual instances this custom has been followed since.

In 1655, the Dutch astronomer, Christiaan Huygens, discovered a satellite of Saturn (now known to be the sixth from the planet). He named it *Titan*. In a way this was appropriate, for Saturn (Cronos)

and his brothers and sisters, who ruled the Universe before Zeus took over, were referred to collectively as "Titans." However, since the name refers to a group of beings and not to an individual being, its use is unfortunate. The name was appropriate in a second fashion, too. "Titan" has come to mean "giant" because the Titans and their allies were pictured by the Greeks as being of superhuman size (whence the word "titanic") and it turned out that Titan was one of the largest satellites in the Solar system.

The Italian-French astronomer, Gian Domenico Cassini, was a little more precise than Huygens had been. Between 1671 and 1684, he discovered four more satellites of Saturn and these he named after individual Titans and Titanesses. The satellites now known to be 3rd, 4th and 5th from Saturn, he named *Tethys*, *Dione*, and *Rhea*, after three sisters of Saturn (Cronos). Rhea was his wife as well. The 8th satellite from Saturn, he named *Iapetus* after one of Saturn's (Cronos's) brothers. (Iapetus is frequently mispronounced. In English, it is "eye-ap'ih-tus.") Here finally, the Greek names were used, chiefly because there were no Latin equivalents, except for Rhea. There the Latin equivalent is "Ops." Cassini tried to lump the four satellites he had discovered under the name of "Ludovici" after his patron, Louis XIV—Ludovicus, in Latin—but that second attempt to honor royalty also failed.

And so during the first half of the history of the telescope, nine new bodies of the Solar system were discovered, four satellites of Jupiter and five of Saturn. Then something more exciting turned up.

On March 13, 1781 a German-English astronomer, William Herschel, surveying the heavens, found what he thought was a comet. This, however, proved quickly to be no comet at all, but a new planet with an orbit outside that of Saturn. (See BEYOND PLUTO, F&SF July, 1960.)

There arose a serious problem as to what to name the new planet, the first to be discovered in historic times. Herschel himself called it "Georgium Sidus" ("George's star") after his patron, George III of England, but this third attempt to honor royalty failed. Many astronomers felt it should be named for the discoverer and called it "Herschel." Mythology, however, won out.

The German astronomer, Johann Bode came up with a truly classical suggestion. He felt the planets ought to make a heavenly family. The three innermost planets (excluding the Earth) were Mercury, Venus, and Mars, who were siblings, and children of Jupiter, whose orbit lay outside theirs. Jupiter in turn was the son of Saturn, whose orbit lay

outside his. Since the new planet had an orbit outside Saturn's why not name it for *Uranus*, god of the sky and father of Saturn. The suggestion was accepted and *Uranus** it was. What's more, in 1798, a German chemist, Martin Heinrich Klaproth discovered a new element he named in its honor as "uranium."

In 1787, Herschel went on to discover *Uranus*'s two largest satellites (the 4th and 5th from the planet, we now know). He named them from mythology, but *not* from Graeco-Roman mythology. Perhaps, as a naturalized Englishman, he felt 200% English (it's that way, sometimes) so he turned to English folk-tales and named the satellites, *Titania* and *Oberon*, after the queen and king of the fairies (who make an appearance, notably, in Shakespeare's "A Midsummer Night's Dream").

In 1789, he went on to discover two more satellites of Saturn (the two closest to the planet) and here, too, he disrupted mythological logic. The planet and the five satellites then known were all named for various Titans and Titanesses (plus the collective name, Titan) Herschel named his two *Mimas* and *Enceladus* (en-sel'a-dus) after two of the giants who rose in rebellion against Zeus long after the defeat of the Titans.

After the discovery of *Uranus*, astronomers climbed hungrily upon the discover-a-planet bandwagon and searched particularly in the unusually large gap between Mars and Jupiter. The first to find a body there was the Italian astronomer, Giuseppe Piazzi. From his observatory at Palermo, Sicily, he made his first sighting on January 1, 1801.

Although a priest, he adhered to the mythological convention and named the new body, *Ceres*, after the tutelary goddess of his native Sicily. She was a sister of Jupiter and the goddess of grain (hence "cereal") and agriculture. This was the second planet to receive a feminine name (Venus was the first, of course) and it set a fashion. *Ceres* turned out to be a small body (485 miles in diameter) and many more were found in the gap between Mars and Jupiter. For a hundred years, all the bodies so discovered were given feminine names.

Three "planetoids" were discovered in addition to *Ceres* over the next six years. Two were named *Juno* and *Vesta* after *Ceres*' two sisters. They were also the sisters of Jupiter, of course, and Juno was his wife as well. The remaining planetoid was named *Pallas*, one of the alter-

**Uranus* is pronounced "yoo'ruh-nus". I spent almost all my life accenting the second syllable and no one ever corrected me. I just happened to be reading Webster's Unabridged one day—

nate names for Athena, daughter of Zeus (Jupiter) and therefore a niece of Ceres. (Two chemical elements discovered in that decade were named "cerium" and "palladium" after Ceres and Pallas.)

Later planetoids were named after a variety of minor goddesses; such as *Hebe*, the cupbearer of the gods, *Iris*, their messenger, the various Muses, Graces, Horae, nymphs and so on. Eventually the list was pretty well exhausted and planetoids began to receive trivial and foolish names. We won't bother with those.

New excitement came in 1846. The motions of Uranus were slightly erratic and from them the Frenchman Urbain J. J. Leverrier (and the Englishman, John Couch Adams) calculated the position of a planet beyond Uranus, the gravitational attraction of which would account for Uranus' anomalous motion. The planet was discovered in that position.

Once again there was difficulty in the naming. Bode's mythological family concept could not be carried on for Uranus was the first god to come out of chaos and had no father. Some suggested the planet be named for its discoverer "Leverrier." Wiser council prevailed. The new planet, rather greenish in its appearance, was named *Neptune*, after the god of the sea.

(Leverrier also calculated the possible existence of a planet inside the orbit of Mercury and named it *Vulcan* after the god of fire and the forge, a natural reference to the planet's closeness to the central fire of the Solar system. However, such a planet was never discovered and undoubtedly does not exist.)

As soon as Neptune was discovered, the English astronomer, William Lassell, turned his telescope upon it and discovered a large satellite, which he named *Triton*, appropriately enough, since Triton was a demigod of the sea and a son of Neptune (Poseidon.)

In 1851, Lassell discovered two more satellites of Uranus, closer to the planet than Herschel's Oberon and Titania. Lassell, also English, decided to continue Herschel's English folklore bit. He turned to Alexander Pope's "The Rape of the Lock" wherein were two elfish characters, *Ariel* and *Umbriel* and these names were given to the satellites.

More satellites were turning up. Saturn was already known to have seven satellites, and in 1848, the American astronomer, George P. Bond, discovered an eighth, while in 1898, the American astronomer, Edward C. Pickering discovered a ninth and completed the list. These were named *Hyperion* and *Phoebe* after a Titan and Titaness. Pickering

also thought he had discovered a tenth in 1905, and named it *Themis*, after another Titaness, but this proved to be mistaken.

In 1877, the American astronomer, Asaph Hall, waiting for an unusually close approach of Mars, studied its surroundings carefully and discovered two tiny satellites, which he named *Phobos* ("fear") and *Deimos* ("terror") two sons of Mars (Ares) in Greek legend, though obviously mere personifications of the inevitable consequences of Mars' pastime of war.

In 1892, the American astronomer, Edward E. Barnard, discovered a fifth satellite of Jupiter, closer than the Galilean satellites. For a long time, it received no name, being called "Jupiter V" (the fifth to be discovered) or "Barnard's satellite." Lately, however, it has been given the name, *Amalthea*. I don't know by whom the name was given or how firmly official it is, but I like it. *Amalthea* was the nurse of Jupiter (Zeus) in his infancy and it is pleasant to have the nurse of his childhood closer to him than the various girl- and boy-friends of his maturer years.

In the 20th century, no less than seven more Jovian satellites were discovered, all far out, all quite small, all probably captured planetoids, all nameless. Unofficial names have been proposed. Of these the three planetoids nearest Jupiter bear the names *Hestia*, *Hera* and *Demeter*, after the Greek names of the three sisters of Jupiter (Zeus). *Hera*, of course, is his wife as well. Under the Roman versions of the names (*Vesta*, *Juno*, and *Ceres*, respectively), all three are planetoids. The two farthest are *Poseidon* and *Hades* the two brothers of Jupiter (Zeus). The Roman version of *Poseidon*'s name (*Neptune*) is applied to a planet. Of the remaining satellites, one is *Pan*, a grandson of Jupiter (Zeus) and the other is *Adrastea* another of the nurses of his infancy.

The name of Jupiter's (Zeus's) wife, *Hera*, is thus applied to a satellite much farther and smaller than those commemorating four of his extra-curricular affairs. I'm not sure that this is right but I imagine astronomers understand these things better than I do.

In 1898, the German astronomer, G. Witt, discovered an unusual planetoid, one with an orbit that lay closer to the Sun than did any other of the then-known planetoids. It inched past Mars and came rather close to Earth's orbit. Not counting the Earth, this planetoid might be viewed as passing between Mars and Venus and therefore Witt gave it the name of *Eros*, the god of love, and the son of Mars (Ares) and Venus (Aphrodite).

This started a new convention, that of giving planetoids with odd

orbits masculine names. For instance, the planetoids that circle in Jupiter's orbit (see THE TROJAN HEARSE, F&SF, December 1961) all received the names of masculine participants in the Trojan war: *Achilles*, *Hector*, *Patroclus*, *Ajax*, *Diomedes*, *Agamemnon*, *Priamus* and so on.

A particularly interesting case arose in 1948, when the German-American astronomer, Walter Baade, discovered a planteoid that penetrated more closely to the Sun than even Mercury did. He named it *Icarus*, after the mythical character who flew too close to the Sun, so that the wax holding the feathers of his artificial wings melted, with the result that he fell to his death.

Two last satellites were discovered. In 1948, the Dutch-American astronomer, Gerard P. Kuiper, discovered an innermost satellite of Uranus. Since Ariel (the next innermost) is a character in William Shakespeare's "The Tempest" as well as in Pope's "The Rape of the Lock," free association led Kuiper to the heroine of "The Tempest" and he named the new satellite, *Miranda*.

In 1950, he discovered a second satellite of Neptune. Now the first satellite, Triton, represents not only the name of a particular demigod, but of a whole class of merman-like demigods of the sea. Kuiper named the second, then, after a whole class of mermaid-like nymphs of the sea, *Nereid*.

Meanwhile, during the first decades of the 20th Century, the American astronomer, Percival Lowell was searching for a ninth planet beyond Neptune. He died in 1916 without having succeeded but in 1930, from his observatory and in his spirit, Clyde W. Tombaugh made the discovery.

The new planet was named *Pluto*, after the god of the Underworld, as was appropriate since it was the planet furthest removed from the light of the Sun. (And in 1940 when two elements were found beyond uranium, they were named "neptunium" and "plutonium" after Neptune and Pluto, the two planets beyond Uranus.)

Notice, though, that the first two letters of "Pluto" are the initials of Percival Lowell. And so, finally, an astronomer got his name attached to a planet. Where Herschel and Leverrier had failed, Percival Lowell had succeeded, at least by initial, and under cover of the mythological conventions.



If "style" (that highly mysterious increment of the writer) truly revealed the spirit and stamp of the man, then Avram Davidson (who usually has these spaces to himself) would have to be a diverse and mysterious man. Which, of course, he is. Take, for example, the story below, concerning the terrible affair of Dame Phillipa Garreck, the man with the false nose, and Motilal Smith, the unspeakably evil Eurasian—words which make a strange sound on paper . . . E.L.F.

WHAT STRANGE STARS AND SKIES

by Avram Davidson

THE TERRIBLE AFFAIR OF Dame Phillipa Garreck, which struck horror in all who knew of her noble life and mysterious disappearance, arose in large measure from inordinate confidence in her fellow-creatures—particularly such of them as she might, from time to time, in those nocturnal wanderings which so alarmed her family and friends, encounter in circumstances more than commonly distressed. This great-hearted and misfortunate woman would be, we may be sure, the first to deplore any lessening of philanthropy, any diminution of charity or even of charitable feeling, resultant from her own dreadfully sudden and all but inexplicable fate; yet, one feels, such

a result is inevitable. I am not aware that Dame Phillipa ever made use of any heraldic devices or mottoes, but, had she done so, "Do what is right, come what may," would have been eminently appropriate.

It is not any especial sense of competency on my part which has caused me to resolve that a record of the matter should and must be made. Miss Mothermer, Dame Phillipa's faithful secretary-companion, to say nothing of her cousin, Lord FitzMorris Banstock, would each—under ordinary circumstances—be far more capable than I of delineating the events in question. But the circumstances, of course, are as far from being "ordinary" as they can possibly be. Miss Moth-

ermer has for the past six months next Monday fortnight been in seclusion at Doctor Hardesty's establishment near Sutton Ho; and, whilst I can state quite certainly the falsehood of the rumour that her affairs have been placed in charge of the Master in Lunacy, nevertheless, Doctor Hardesty is adamant that the few visitors she is permitted to receive must make no reference whatsoever to the affair of last Guy Fawkes Day, the man with the false nose, or the unspeakably evil Eurasian, Mortal Smith. As for Lord FitzMorris Banstock, though I am aware that he has the heart of a lion and nerves of steel, his extreme shyness (in no small measure the result of his unfortunate physical condition) must advertise to all who know him the unlikelihood of his undertaking the task.

It falls to me, therefore, and no one else, to procede forthwith in setting down the chronicle of those untoward and unhappy events.

Visitors to Argyll Court, which abuts onto Primrose Alley (one of that maze of noisome passages off the Commercial Road which the zeal and conscience of the London County Council cannot much longer suffer to remain untouched), visitors to Argyll Court will have noticed the large sign-board affixed to the left-hand door as one enters. Reading, "If

The Lord Will, His Word Shall Be Preached Here Each Lord's Day At Seven O'Clock In The Evening. All Welcome," it gives notice of the Sabbath activities of Major Bohun, whose weekdays are devoted to his sacred labors with The Strict Antinomian Tram-Car and Omnibus Tract Society (the name of which appears on a small brass plate under the sign). Had the major been present that Fifth of November, a different story it would be which I have to tell; but he had gone to attend at an Anti-Papistical sermon and prayer-meeting holden to mark the day at the Putney Tabernacle.

The foetid reek of the Court, which has overwhelmed more than one less delicately bred than Dame Phillipa, bears—besides the effluvia of unwashed beds and bodies emanating from the so-called Seaman's Lodging-House of Evan-bach Llewellyn, the rotting refuse of the back part of a cookshop of the lowest sort, bad drains, and the putrid odors of Sampson Stone's wool-pullery—the tainted breath of the filthy Thames itself, whose clotted waters ebb and flow not far off.

On many an evening when the lowering sun burned dully in the dirty sky and the soiled swans squatted like pigs in the mud-banks of London River, the tall figure of Dame Phillipa would turn (for the time being) from

the waterfront, and make her way towards the quickening traffic of the Commercial Road and Goodman Fields; proceeding through Salem Yard, Fenugreek Close, Primrose Alley, and Argyll Court. The fashionable and sweet-smelling ladies of the West End, as well as their wretched and garishly bedaubed fallen sisters, smelling of cheap "scent" and sweetened gin, just at this hour beginning those peregrinations of the East End's mean and squalid streets for which those less tender than Dame Phillipa might think them dead to all shame; were wearing, with fashion's licence, their skirts higher than they had ever been before: but Dame Phillipa (though she never criticized the choice of others) still wore hers long, and sometimes with one hand she would lift them an inch or two to avoid the foul pavements—though she never drew back from contact, neither an inch nor an instant, with any human being, however filthy or diseased.

Sometimes Miss Mothermer's bird-like little figure was with her friend and employer, perhaps assuming for the moment the burden of the famous Army kit-bag; sometimes—and such times Dame Phillipa walked more slowly—Lord FitzMorris Banstock accompanied her; but usually only quite late at night, and along the less-frequented thoroughfares, where

such people whom they were likely to meet were too preoccupied with their own unhappy concerns, or too brutalized and too calloused, to stare at the muscular but misshapen peer for more than a second or two.

The kit-bag had been the gift of Piggott, batman to Dame Phillipa's brother, the late Lt.-Colonel Sir Chiddiock Garreck, when she had sent him out to the Transvaal in hopes that that Province's warmer and dryer air would be kindlier to his gas-ruined lungs than the filthy fogs and sweats of England. The kit-bag usually contained, to my own knowledge, on an average evening, the following:

Five to ten pounds in coins, as well as several ten-shilling notes folded quite small. Two sets of singlets and drawers, two shirts, and two pair of stockings: none of them new, but all clean and mended. A dozen slices of bread and butter, wrapped in packets of three. Ten or twenty copies of a pamphlet-sized edition of the Gospel of St. John in various languages. A brittania-metal pint flask of a good French brandy. A quantity of hard-cooked eggs and an equal supply of salt and pepper in small screws of paper. Four handkerchiefs. First-aid equipment. Two reels of cotton, with needles. A packet of mixed toffees. The Book of Common Prayer. Fifteen packets of five

Woodbine cigarettes, into each of which she had thrust six wooden matches. One pocket-mirror. A complete change of infant's clothing. Several small cakes of soap. Several pocket-combs. A pair of scissors.

And three picture-postcards of the Royal Family.

All this arranged with maximum efficiency in minimum space, but not packed so tightly that Dame Phillipa's fingers could not instantly produce the requisite article. It will be observed that she was prepared to deal with a wide variety of occasions.

Tragic, infinitely tragic though it is, not even a person of Dame Phillipa's great experience among what a late American author termed, not infelicitously, *The People of the Abyss*, could have been prepared either to expect or to deal on this occasion with such persons as the man wearing the false nose or the hideously—the unspeakably evil Eurasian, Motilal Smith.

The countenance of Motilal Smith, once observed, is not one likely ever to be forgotten, and proves a singular and disturbing exception to the rule that Eurasians are generally of a comely appearance; it being broad and frog-like in its flatness, protruberance of the eyes (which are green and wet-looking), reverse U-shaped mouth, and its multiplicity of warts or wart-like swellings.

Most striking of all, however, is the air of slyness, malevolence, of hostility both overt and covert, towards everything which is kindly and decent and, in a word, human.

Motilal Smith has since his first appearance in the United Kingdom been the subject of unremitting police attention, and for some time now has gained the sinister distinction of being mentioned more often in the Annual Report of the League of Nations Commission on the Traffic in Women and Children than any other resident of London. He has often been arrested and detained on suspicion, but the impossibility of bringing witnesses to testify against him has invariably resulted in his release. Evidences of his nefarious commerce have come from places so far distant as the Province of Santa Cruz in the Republic of Bolivia and the Native Indian States of Patiala and Cooch Behar, as well as two of the Trucial Sheikhdoms, the Free City of Danzig, and Deaf Smith County in the Commonwealth of Texas; none of which, it must be regretted, is admissible in proceedings at the Old Bailey. As he is a British subject by birth, he cannot be neither deported nor denied admission on his return from frequent trips abroad. He is known to be always ready to purchase, he is entirely eclectic as to the nature of

the merchandise, and he .pays well and he pays in gold.

It is necessary only to add that, offered any obstacle, affront, or rebuff, he is unremitting in his hostility, which combines the industry of the West with the patience of the East. Smith occupies both sides of the semi-detached villa in Maida Vale of which he owns the freehold; its interior is crammed with opulent furnishings from all round the world, and stinks of stale beer, spilt gin, incense, curry, raw fish, the foul breaths and bodies of those he deals with, and of chips fried in ghee.

His long, lank, and clotted hair is covered in scented grease, and on his fingers are rings of rubies, diamonds, pearls and other precious stones worth with their settings a prince's ransom. Add only the famous Negrohead opal worn in his stained silk four-in-hand (and for which Second Officer Smollett of the *Cutty Sark* is said to have strangled Mrs. Pigler), and there you have the creature Motilal Smith in all his repulsive essence.

The night of that Fifth of November found the unfortunates among whom this great lady pursued her noble work no more inclined than in other years to celebrate the delivery from Gunpowder Plot of King James VI and James I and his English Parlia-

ment. Here and there, to be sure, in the glare of the gin-palaces of the main thoroughfares, a group of grimy and tattered children had gotten up an even more unsavory Guy; for them Dame Phillipa had provided herself with a large supply of pennies. But that night as on most other nights there was little enough evidence of innocent gayety.

There are multitudes, literally multitudes, in this vast labyrinth of London for whom the normal institutions of a human society seem barely to exist. There are physicians in the East End, hospitals, and dispensaries; yet numbers past counting will suffer injury and disease and creep off to die like brutes in their dim corners, or, if they are fortunate, by brute strength survive. There are public baths in every borough, and facilities for washing clothes, yet many never touch water to their skins, and wear their rags unchanged till they rot. Babes are born without benefit of any human witness to the event save their own wretched mothers, though a word to the great hospital in Whitechapel Road will bring midwife and physician without charge. And while eating-places abound, from quite decent restaurants down to the dirty holes-in-the-walls offering tuppenny cups of tea and sixpenny papers of breaded smelts and greasy chips, and while private

and public charity arrangements guarantee that no one need quite die of hunger who will ask to be fed, no day goes by without its toll from famine of those who—having their hoards of copper and silver—are disabled by their madness from spending either tuppence or shilling; or who find it much, much easier to die like dogs in their secluded kennels than come forward and declare their needs.

As the pigeons in Trafalgar Square have learned when and where the old man with the bag of breadcrumbs will appear, as the ownerless cats near Billingsgate can tell what time and in what place to scavenge for the scraps of fish the dustman misses, as the rats in the sewers beneath Smithfield Market know without error the manner in which "they seek their meat from G-d"; just so, from this stinking alley and from that crumbling tenement, here from underneath a dripping archway and there from a disused warehouse, slinking and creeping and peering fearfully and furtively and sidling with their ragged backs pressed against ragged walls, there appeared by one and by one the cast-offs—one must call them "humans", for what other name is theirs?—the self-exiled, the utterly incapable, to take in their quick reptilian grasp the things Dame Phillipa had for them. She knew, knew

by instinct and knew by practice, which ones would benefit by a shilling and which by half-a-crown; she knew those to whom money was of no more use than cowry-shells but who would relish the meat of a hard-cooked egg and the savor of the tiny scrap of seasoning which went with it; knew those who would be hopelessly baffled by the labor of cracking the shell but who could manage to rip the paper off a packet of bread and butter (huddled and crouched in the rank, familiar darkness of their burrows, tearing the soft food with their toothless gums); knew those who would fight, squealing or wordlessly, fight like cornered stoats rather than surrender a single one of the unspeakably filthy rags into which their unspeakably filthy bodies were sewn; and those who would strip by some forgotten water-tap and wash themselves and put on clean things—but only if provided them, having no longer in many cases the ability to procure either soap or singlets for themselves. She also knew who could be coaxed another foot or two up the path to self-respect by the tempting bait of mirror and comb, the subtle appeal such things made to the ravaged remnants of pride. And she knew when even a handful of toffee or a small picture of the charismatic King and Queen could brighten

a dim corner or an eroded mind.

And often (though not always) with her on this humble and saintly mission went her faithful secretary-companion, Miss Mothermer, though by herself Miss Mothermer would have died a thousand dreadful deaths in such places; and sometimes Dame Phillipa was accompanied by her unhappy and unfortunate cousin, Lord FitzMorris Banstock, though usually he shunned the company of any but his few, familiar servants.

On this particular night, Mawhinney, his chauffeur-footman, had been obliged by a Guy Fawkes bonfire and its attendant crowd to drive the heavily curtained Rolls motor car by a different and less familiar route; hence he arrived later at the usual place of rendezvous: Miss Mothermer and Dame Phillipa, tall figure and tiny one, picture-hat and toque, had come by and, as was the unspoken understanding, had not tarried. So many considerations affected the presence or absence of Lord FitzMorris Banstock: was he engaged in a conversation particularly interesting by means of his amateur wireless radio equipment, was he in more pain than a certain degree, was he in less pain than a certain degree, was the moon too bright—for one or more of these reasons the star-

curs't noble lord might not come despite his having said he might.

The obedient Mawhinney did not turn his head as his master slowly and awkwardly crept from the vehicle, inch by inch over the black silk upholstery. Nor, well-trained, did he suggest leaving the car in a garage and coming with his master. He waited a few moments after the door closed, then he drove straightaway back to Banstock House, where he stayed for precisely three hours, turning the Tarot cards over and over again with old Gules, the butler, and Mrs. Ox, the cook. On this Fifth of November night they observed that the Priestess, the Fool, and the Hanged Man turned up with more than their common frequency; and were much excersized to conjecture what, if anything, this might portend: and for whom.

And at the conclusion of three hours he put on his cap and coat and drove back to the place set.

Besides those nameless (and all but formless) figures from the silent world, of whom I had spoken above, there were others who awaited and welcomed Dame Phillipa's presence; and among them were women with names like Flossie and Jewel and Our Rose, Clarabel and Princess Mick and Jenny the Hen, Two-Bob Betty and Opaline and Queeny-Kate. She spoke to every one of them, gave them (if they re-

quired it, or thought they might: or if Dame Phillipa thought they might) the money needed to make up the sum demanded by their "friends" or "protectors"; money for rent or food or what it might be, if they had passed the stage where their earnings could possibly be enough to concern the swine who had earlier lived on them. She tended to their cuts and bruises the poor wretches received in the way of business, and which they were too ashamed to bring before the very proper nurses and the young, lightheartedly cruel, interns.

Sometimes she interceded for them with the police, and sometimes she summoned the police to their assistance; her manner of doing this was to direct Miss Mothermer to blow upon the police whistle she wore upon a lanyard, Dame Phillipa not liking the vibration this made upon her own lips.

Those to whom Dame Phillipa may have seemed but a tall, gaunt eccentric woman, given to wearing old-fashioned dresses, and hats which ill became her, would do well to recollect that she was among the very first to be honored with the title of *dame*; and that His Majesty's Government did not take this step exclusively in recognition of her career prior to her retirement as an educationist, or of her work, through entirely legal methods, on behalf

of the Women's Suffrage Movement.

It was close to midnight when the two ladies arrived in Primrose Alley and Dame Phillipa rapped lightly with her walking-stick upon the window of a woman in whose maternity she had interested herself: actually persuading the young woman, who was not over-bright, to accept medical attention, eat something resembling proper food, and have the child christened in the nearby and unfortunately ill-attended Church of St. Gustave Widder-shins. She rapped a second time—loud enough (she hoped) to wake the mother, but not loud enough to wake the child. As it happened it was the father she woke, a young man who circulated among three or four women in a sort of tandem polygamy; and who informed the lady that the baby had been sent to its mother's people in Westham, and who begged her, not altogether disdainfully, for sweet Christ's sake to bugger off and let him get back to sleep again.

Dame Phillipa left him to his feculent slumbers in absolute but resigned certainty that this time next year she would again be called upon to swaddle, victual, and renounce by proxy the World, the Flesh, and the Devil, on behalf of another squaling token of his vigour—unless the young woman should perhaps

miscarry, as she had done twice before, or carry out her own suggestion of dropping the child in the river, by accident, like.

It was as she turned from the window, then, that Dame Phillipa first clearly observed the man wearing the false nose—as she thought, because of the Guy Fawkes festivities; though it appears Miss Mothermer instantly suspected that he did so by way of disguise—although she had been aware, without giving consideration to the matter, that there had been footsteps behind her. All inquiries as to this man's identity or motive have failed, but the singularity of his appearance is such that, unless he has been secretly conveyed out of the Kingdom, he cannot long continue to evade the vigilance of the police.

Thinking nothing further of the matter, as we may assume, Dame Phillipa and her companion continued their way into Argyll Court. The sound of voices, and the odor of hot gin and lemon, both proceeding from a bow window greatly resembling in carving and overhang the fore-castle of an ancient sailing-ship, directed her attention to the gas-jet which burned redly in the close air, illuminating the sign of the seaman's lodging-house. In times gone by, Evan-bach Llewellyn had been a notorious crimp. Board regulations, closely at-

tended to, had almost put a stop to this, as far as vessels of British register were concerned. It was widely said, however, and widely believed, that the masters of foreign vessels putting into London with cargoes of coffee, copra, palm oil, fuel oil, hardwood and pulpwood; and finding members of their crew swallowed up by The Smoke, often appealed to the giant Silurian (he sang bass in the choir of Capel Cymrig) for replacements: and did not appeal in vain. Protests entered by surprised seamen, whose heads cleared of chloral in the Bay of Biscay, when they found themselves on board of strange vessels whose language they often did not recognize, let alone speak, would in the general course of things prove quite bootless.

As Dame Phillipa's attention was distracted to the window, two men, who must have been huddled silently at the other side of the court, came suddenly towards the two ladies, reeling and cursing, striking fiercely at one another, and giving off the fumes of that poisonous mixture of methylated spirits and cheap port wine commonly called *red biddy*. The ladies took a few steps in confusion, not knowing precisely what course to take, nor having much time to consider it: they could not go forward, because of the two men fighting, and it seemed that when they attempted

to walk to the side, the bruisers were there, cutting off their way, too.

Dame Phillipa therefore turned quickly, leading Miss Mothermer in the same direction, but stopped short, as, out of Primrose Alley, whence they had just issued, darted the man who had been wearing the false nose. He made a curious sound as he did so; if he spoke words is not certain; what is certain is that he had plucked the false pasteboard from his face—it was hideously pock-marked—and that the flesh underneath was a mere convoluted hollow, like some gross navel, but nothing like a human nose.

Miss Mothermer gave a stifled cry, and drew back, but Dame Phillipa, though certainly no less startled, placed a reassuring hand on her companion's arm, and courteously awaited what this unfortunate might have to say or to ask. He beckoned, he gestured, he mewled and gibbered. Murmuring to Miss Mothermer that he evidently stood in need of some assistance, and that they were bound to endeavour to find what it was, Dame Phillipa stepped forward to follow him. For an instant only Miss Mothermer hesitated—but the two larikins menaced from behind, and she was too fearful for herself and for Dame Phillipa to allow her to go on alone; perforce she followed. She followed into a

door which stood open as if waiting.

If her testimony (and if one may give so succinct a name to confused and diffused ramblings noted down by Doctor Hardesty over a period of several months) may be relied on, the door lay but a few paces into Primrose Alley. The facts, however, are that no such door exists. The upper part of the Alley contains the tenements officially designated as Gubbinses' Buildings and called, commonly, "the Jakes": entrance is through a covered archway twenty feet long which divides into two shallow flights of steps from each of which a hallway leads to the individual apartments. It was in one of these, the window and not the door of which faced the Alley, that the young parents of Dame Phillipa Garreck's godchild were lodging. The lower part of the Alley on the same side is occupied by the blind bulk of the back of the old flour warehouse. The opposite side is lined with the infamous Archways, wherein there are no doors at all. There are, it is true, two doors of sorts in the warehouse itself, but one is bricked up and the other is both rusted shut and locked from the inside. A search of the premises *via* the main gate failed to show any signs that it had been opened in recent years—or, indeed, that it could have been.

It was at shortly after one o'clock on the morning of the sixth of November that Lord FitzMorris Banstock, toiling painfully through Thirza Street in the direction of Devenport Passage, received (or perhaps I should say, became aware of) an impression that he should retrace his steps and then head north. There is no need to suggest telepathy and certainly none to mention the supranormal in conjunction with this impression: Miss Mothermer was most probably blowing the police-whistle, blowing it with lips which trembled in terror, and so weak and feeble was the sound produced that no police constable had heard it. On the conscious level of his mind Lord FitzMorris did not hear it, either. But there are sensual perceptions of which the normal senses are not aware, and it was these, which there can be no doubt that he (perhaps in compensation, perhaps sharpened by suffering; perhaps both) possesses to an unusual degree, which heard the sound and translated it. He obeyed the impulse, walking as fast as he could, and as he walked he was aware of the usual noises and movements in the darkness—rustlings and shufflings and whispers, breathings and mutterings—which betokened the presence of various of Dame Phillipa Garreck's charges. It seemed to him that they were

of a different frequency, as he put it to himself, accustomed to think in wireless radio terms, this night. That they were uncommonly uneasy. It seemed to him that he could sense their terror.

And as he turned the corner into Salem Yard he saw something glitter, he saw something flash, and he knew in that instant that it was the famous Negrohead opal, which he had seen that one time before when his lady cousin occasioned the assistance of the Metropolitan Police to rescue the girl Bessie Lovejoy, then in process of being purchased for the ill-famed Khowadja of Al-Khebur by the ineffably evil Motilal Smith.

It glittered and flashed in the cold and the darkness, and then it was gone.

Fenugreek Close is long and narrow and ill-lit, its western and longest extremity (where the Lascar, Bin-Ali, perished with the cold on the night of St. Sylvester) being a *cul-de-sac* inhabited—when it is inhabited at all—by Oriental seamen who club together and rent the premises whilst they await a ship. But there were none such that night. It was there, pressed against the blank and filthy wall, pressing feebly as if her wren-like little body might obtain entry and safety and sanctuary, sobbing in almost incoherent terror, that Lord FitzMorris Banstock found the crouching form of Miss Mothermer. The

police-whistle was subsequently discovered by the infamous Archways, and Miss Mothermer has insisted that, although she would have sounded it, she did not, for (she says) she could not find it; although she remembers Dame Phillipa pressing it into her hand. On this point she is quite vehement, yet one is no more apt to credit it than her statement about the open door towards which they were led by the man without a nose: for if Miss Mothermer did not blow upon the whistle, who did?

The noble and misfortunate lord did not waste breath inquiring of his cousin's companion if she were all right, it being patent that she was not. He demanded, instead, what had become of Dame Phillipa; and upon hearing the name Miss Mothermer became first quite hysterical and then unconscious. Lord FitzMorris lifted her up and carried her to the place of rendezvous where, exactly on time, Mawhinny, his chauffeur-footman, had just arrived with the Rolls motor-car. They drove immediately to Banstock House where she was given brandy and put to bed by Mrs. Ox, the cook, whilst Lord FitzMorris summoned the police.

An alarrum had already been given, or, at any rate, an alarrum of sorts. One of the wretchedly miserable folk to whose succor Dame Phillipa devoted so much of

her time, having somehow learned that she was in danger, had informed Police-Sergeant L. Robinson to this effect. This man's name is not known. He is, or at any event was, called by the curious nickname of "Tea and Two Slices", these being the only words which he was usually heard to utter, and then only in a sort of whisper when ordering the only items he was known to buy. His age, background, residence, and present whereabouts are equally unknown. He had apparently an absolute horror of well-lighted and much-frequented places and an utter terror of policemen, one cannot tell why, and it may be hard to imagine what agonies and efforts it must have cost him to make his way to the police-station and inform Sergeant Robinson that he must go at once and "help the lady." Unfortunately and for unknown reasons, he chose to make his way to the police-station in Whitechapel instead of to the nearer one in Shadewell. His testimony would be of the utmost importance, but it cannot now be obtained, for, after giving the alarrum, he scurried forth into the night again and has not been seen since.

The matter is otherwise with the testimony of the seaman, Greenbriar. It is available, it is copious, it fits in with that of Miss Mothermer, it is unfortunate that it is quite unbelievable. Unbeliev-

able, that is, unless one is willing to cast aside every conceivable limit of credulity and to accept that on the night of Guy Fawkes Day in that year of our sovereign lord King George V the great and ancient city of London was the scene of a visitation more horrible than any in its previous history.

Albert Edward Greenbriar, Able-Bodied Seaman, is thirty-one years of age, and except for two occasions on which he was fined, respectively, £2 and £2.10, for being drunk and disorderly, he has never been in any trouble with the authorities. On the first of November he landed at St. Katherine Docks aboard the merchant vessel *Salem Tower*, from the Straits Settlements with a cargo of rubber, copra, and tinned pine-apples. Neither the *Salem Tower* nor Greenbriar had been in the United Kingdom for the space of eleven months, and, consequently, when paid off, he was in possession of a considerable sum of money. In the course of one week he had, with the assistance of several women who are probably prostitutes, dissipated the entire sum. On discovering this the women, who share a communal flat in Poplar, asked him to leave.

It was Greenbriar's intention to obtain another ship, but in this endeavour he was unsuccessful. He managed to obtain a loan of

half-a-crown from a casual acquaintance and spent the night at a bed-and-breakfast place in Rope-makers Fields, Limehouse. The following evening, footsore and hungry and, save for a single sixpence, penniless, he found himself in the Commercial Road, where he entered a cookshop whose sign-board announced that good tea, bread, smelts and chips, were obtainable for that sum. Obtainable they were, good they were not, but he was in no position to object. Having finished, he inquired the way to the convenience, and there retired. On emerging he observed that he was next to the back door which opened onto Argyll Court, although he did not know that was its name, and on looking out he espied a sign.

The sign is still there; in white calligraphy of a fine Spencerian sort upon a black background it reads, *Seamen's Lodging House/ Good Beds/ E. Llewellyn, Prop.*

Albert Edward Greenbriar entered, rang the bell for the governor, and, upon the instant, saw a panel open in the wall, through which a face looked at him. It was the face of a gigantic cherub, white and dimpled and bland, surmounted by a pall of curly hair; in short, it was the face of Evanbach Llewellyn. Greenbriar in a few words stated his situation and offered to give over his seaman's papers as a surety until such time as he might obtain a ship, in re-

turn for bed and board. The governor thrust forth a huge, pale hand, took the documents, slid shut the panel, and presently appeared to beckon Greenbriar down a corridor, at the end of which was a dimly lit dormitory. He gave him a thin blanket which was all in all not quite so filthy as it might have been, informed him that gaming and novel-reading were not permitted on the premises, invited him to take any bed he chose, and forthwith withdrew.

Greenbriar found an empty pallette, under the head of which he placed his shoes, not so much as a pillow as a precaution, drew the cover about him and fell instantly asleep. He was awakened several times by the entry of other men, some of whom appeared to have been flung rather than escorted into the room, and once he was awakened by the sound of the proprietor playing upon a small patent organ a hymn of his own composition on the subject of the Priesthood of Melchisedec. Greenbriar gazed at the tiny blue tip of the night-light as it burned tremulously in the twisted jet and on the odd and grotesque shadows cast upon the stained and damp-streaked walls by the tossings and turnings of the lodgers, and listened to the no less odd nor grotesque noises made by them. It was only by the start he gave upon being awakened that he realized that he had gone to sleep again.

Who awakened him he did not know, but, although the light was no brighter, there was a stir in the dormitory and men were getting to their feet and he heard the word "scoff" repeated several times. He dashed water on his face and moved with the others into what was evidently the main kitchen of the establishment. To his surprise he observed that the clock there read eleven o'clock. It was too dark to be morning. Evidently he had slept only a few hours or he had slept round the clock and a bit more. It seemed an odd hour for victuals but he was beginning to conceive the idea that this was an odd place.

Broiled bloaters, fried sausage, potatoes, cabbage and sprouts were being turned out of pots and pans and dumped higgeldy-piggeldy onto cracked and not over-clean plates; and tea was steaming in coarse crockery cups. No one ventured to eat or drink, however, until Evan-bach Llewellyn had pronounced a grace in the Cymric tongue and immediately after the Amen imparted a piece of information, videlicet that he had a ship for them. It was a good ship, too, he said; they would all be very pleased with it; it was not one of their dirty old English tubs but a fine modern vessel: he urged them all to eat hearty of the scoff, or victuals, so that no time need be lost in getting aboard, and he then produced a large bottle of gin

and proceeded to pour a generous portion into each cup, with many assurances that it was free and would come out of his own commission.

No sooner had he given the signal, with a wave of his pale and dimpled paw, than the men fell to like so many ravening wolves, cramming the hot food into their mouths and gulping down the gin and lemon tea. Greenbriar concedes that the ailment was savory, and, finding himself hungrier than he had thought, took but a hasty swallow of the drink before addressing himself at length to the solids. A furtive movement at his elbow caused him to cease, abruptly. The man to his right, a hulking fellow with red hair and an exceedingly dirty face, was emptying a mug and looking at him out of the corner of his eye. It took but a second to ascertain that the wretched fellow had all but drained his own supply and then switched cups and was now doing away with Greenbriar's, who contented himself with stealing a link of the man's sausage whilst the latter was elaborately gazing elsewhere. Steeling himself to meet this man's resentment, he was dumbfounded to observe the fellow fall upon his face into the mashed potatoes and sprouts on his plate.

Within a matter of seconds, almost as if it were one of the contagious seizures which takes

hold at times of the unfortunate patients of an institution for the epileptic—within a matter of seconds, then, all the others at the table sank down into unconsciousness, and Greenbriar, following suit, knew no more.

He awoke to a scene of more than Gothick horror.

He lay with his head against the silent form of another man, another one he could feel the weight of on his legs, and others lay like dead men all about. They were not dead, he knew, for he could hear them breathing. The room where they lay was walled and floored and roofed in stone and at regular intervals were carvings in *bas-relief* of a strange and totally unfamiliar sort. Paraffin lamps were set into niches here and there. There was a humming noise whose origin was not visible to him. Very slowly, so as not to attract attention (for he could hear voices), Greenbriar turned his head. As he did so he felt that there was a rope tied round his neck, and a sudden and quite involuntary convulsive moment which he gave upon this discovery disclosed to him that his hands were similarly bound. Thus urged on to even greater caution, the man took a quite long time in shifting his position so as to obtain some intelligence of his surroundings. If what he had seen before was strange and uneasy

enough, what he saw now was sufficient to deprive him for the moment of the use of his limbs altogether.

Off to one side, bound and linked arms to arms and necks to necks like a prostrate caffle of slaves, and to all appearance also unconscious, were the bodies of a number of women; how many, he could not say, but evidently less than the number of the men. This, however, and however shocking even to the sensibilities of a seafarer, this was nothing—

Directly in front of his gaze, which was at an angle, and seated upon a sort of altar, was a figure as it were out of eastern clime: red-bronze in color, hideous of visage, and with six arms. Bowing low before it was a man, who addressed it in placatory tones and with many fawning gestures.

No other thought occurred to the British sailor at that moment but that he was in some sort of clandestine Hindoo temple and that he and all his other companions would presently be sacrificed before this idol; not being aware that such is not the nature of character of the Hindoo religion which contains, despite numerous errors and not a few gross importures, many sublime and lofty thoughts. But be that as it may; the red-bronze-colored figure proceeded to move its limbs, the torso stirred, the entire body leaned forward. The figure spoke, and as

it spoke, it seized the man with four of its limbs and struck him with the other two. Then it dropped him. As he scrambled to his feet his face was turned so that the sailor could see it, and he saw that it had no nose.

Greenbriar must once again have passed into unconsciousness. When again he awoke the altar was empty, and he could not see the "idol", but he could hear its voice. It was speaking in anger, and as one used to command. Another voice began when this one (deep, hollow, dreadful) had ceased; the new voice was a thin one, and it took a moment for him to realize that, despite its curious snuffling quality, it was speaking a sort of English. Two other voices replied to it, also in English; one was that of Evan-bach Llewellyn, the other one he did not know. By his description of both speech and speaker, for in a moment the latter moved into view, it is apparent that this was no other than the inhuman and unconscionable Eurasian, Motilal Smith.

Something, it seemed, was "not enough." There was an insufficiency of . . . something. This it was which occasioned the wrath of the person or creature with the six arms. And he was also in great concern because of a shortage of time. All four—the creature with six arms, the man without a nose, Smith and Lle-

wellyn— kept moving about. Presently there was the scrape of wood and then a thud and then the wet and dirty odor of the River. The thought occurred to Greenbriar that they might be thrown into the Thames, which was then at high tide; he reflected that (in common with a great many seamen) he had never learned to swim; and then, for a third time, he fainted.

When he awoke he could hear someone singing the Doxology, and he thought—so he says—that he had died and was now in Heaven. One glance as he opened his eyes was enough to undeceive him. He lay where he had before and everything was as it was before, save that there were two people present who he is certain were not there before, and by his description of them they were clearly Dame Phillipa Garreck and her secretary-companion, Miss Mothermer.

Miss Mothermer was crouched down with her hands over her eyes, whether in prayer or terror or not inconceivably both, he could not say. Dame Phillipa, however, was otherwise engaged, for she moved from insensate figure to insensate figure and the light gleamed upon the scissors with which she was severing their bonds. She spoke to each, shook them, but was able to elicit no response. At this, Greenbriar regained his voice and entreated

her help. She proceeded to cut the ropes which bound him, and left off her singing of the Doxology to enquire of him if he had any knowledge as to why they were all of them being detained, and what was intended to be done with them. He was assuring her that he did not know, when a door opened and Miss Mothermer began to scream.

That a fight ensued is certain. Greenbriar was badly cut about and Miss Mothermer received bruises which were a long time in vanishing, though in this I refer only to bruises of the flesh; those of the spirit are still, alas, with her. But he can provide us with few details of the conflict. Certain, it is, that he escaped; equally certain, so did Miss Mothermer. Dame Phillipa plainly did not. Greenbriar was discovered at about half-past one of the morning wandering in a daze in the vicinity of the Mile End Road by a very conscientious alien named Grebowski or Grebowsky, who summoned medical attention and the police. Little or no attention would or could have been paid to Greenbriar's account, had it not been for his description of the two ladies. His relation, dovetailing as it did with that of Miss Mothermer, left the police no choice but to cause a search to be made of the area of Argyll Court, in one corner of which a false nose was found.

Acting on the information received and under authority of a warrant, Superintendent **Sneath**, together with a police-sergeant and a number of constables, entered Llewellyn's premises, which they found completely deserted. Soundings of the walls and floors indicated the presence of passages and rooms which could have had no place in a properly-conducted establishment licensed under the Common Lodging-houses Act, and these were broken into. A cap belonging to Greenbriar was found in one of these corridors, as was part of the lanyard of Dame Phillipa's police-whistle. There was a perfect maze of rabbit-warren of them, and, on the lowest level, there was discovered that chamber, the existence of which was previously publicly unknown, and which Professor Singleton of the University of London has pronounced to be a genuine Mithrarium of the reign of Marcus Aurelius, or perhaps, Nerva; and which was used by the unscrupulous Llewellyn for the illicit portion of his professional activity. It would have been here that the captives were assembled, if Grenbriar's account is to be believed. What is, as a first premise, obvious, is that it cannot possibly be believed.

That Lord FitzMorris Banstock has chosen to believe it is, I am constrained to say, a greater testimony to the powers of his

imagination than to any inherently credible elements in the story. The man Greenbriar now forms part of the staff of Banstock House; this is entirely the affair of Lord FitzMorris himself, and requires no comment on my own part, nor shall it obtain any. It may, however, be just as well to include some opinions and observations which are the fruits of Lord FitzMorris's very understandingly deep concern in this tragic and intensely puzzling affair.

He has collected a number of reports of some sort of aquatic disturbance moving downstream from London River early in the morning of the sixth November just about the time of the turning of the tide. To this he compares a report of the Astronomer Royal's concerning an arc of light which appeared off the Nore immediately subsequent. These have led him to the opinion that a craft of unknown origin and nature moved underwater from London to the sea and then rose not only above the surface of the water but into the air itself. This craft or vessel was captained by the creature with the six arms, and the man without a nose would have been an inferior officer aboard of her. Somehow this vessel became short of personel and applied to Evanbach Llewellyn to make up the shortage by crimping or shanghaiing the requisite Number. For reasons which cannot be known

and concerning which I, for one, would rather not speculate, several women were also required (Lord FitzMorris is of the opinion that they were required only for such duties as members of their sex commonly fulfill in the mercantile navies of various foreign nations, such as service in the steward's branch). This being out of Llewellyn's line of business, an appeal was made by him to the notorious and wicked Eurasian, Motilal Smith, who is known to have left his headquarters in the semi-detached villa in Maida Vale on the Fifth of November, whither he never returned.

Lord FitzMorris suggests two possible provenances for this curious and hypothetical vessel. Suppose, he suggests, the being with the six arms to have been the original of the many East Indian and Buddhist myths depicting such creatures. It is likely, then, that the ship or submarine-aëroplane emanated from the vast and unexplored regions in the mountains which ring round the northern plateau of Thibet, the inhabitants of which have for centuries been rumoured to possess knowledge far surpassing ours, and which they jealously guard from the mundane world. The other possibility is even less likely, and is reminiscent, I fear, far more of the romances associated with the pen of Mr. Herbert G. Wells, a journalist of radical tendencies, than with proper

scientific attitudes. Do not the discoveries of Professor Schiaparelli, establishing that there are canals upon the planet Mars, demonstrate that the inhabitants thereof must be given to agricultural pursuits? In which case, how unlikely that they should engage themselves in filibustering or black birding expeditions to, of all conceivable places, the civilized capital city of the British Empire!

Lord FitzMorris thinks that this theoretical craft of his must have carried off the unscrupulous Evan Llewellyn in order to make up the tally of captives; how much more likely it is that this wicked man has merely fled to escape detection, prosecution, and punishment—perhaps to the mountains of wild Wales, where the King's writ runs scarcely more than it does in the mountains of Thibet.

Concerning the present whereabouts of Motilal Smith, we are on firmer ground. That he intended to devise harm to Dame Phillipa, who had on far more than one occasion interfered with him in his nefarious traffickings, we need not doubt. The close search of Superintendent Sneath of the premises on and about Argyll Court, Primrose Alley, Fenugreek Close and Salem Yard uncovered a sodden mass of human clay lying part in and part out of a pool of muck far under the notorious Archways. It was the drowned body of Motilal Smith himself; both from the evi-

dence of his own powerful physique and the presence of many footprints thereabouts, it is clear that a number of persons were required, and were found, to force him into that fatal submersion. The friends—silent though they are to the world, dumb by virtue of their affliction and suffering—the friends of Dame Phillipa Garreck, the so-called and by no means ill-named People of the Abyss, whom she so constantly and so assiduously attended upon, had avenged their one friend and sole protector. It must now, one fears, go ill with them. The body of this unspeakably evil man, as well as his entire and vast estate (except the famous Negrohead opal, which was never found), was at once claimed by his half-brother,

Mr. Krishna Bannerjee. The body was removed to Benares, and there subjected to that incomplete process of combustion at the burning ghauts peculiar to the Hindoo persuasion; and has long since become the prey of the wandering crocodiles which scavenge perpetually up and down the sacred waters of the River Gunga.

As I commence my last words for the present on the subject of this entire tragic affair I must confess myself baffled. Inacceptable as Lord FitzMorris's theories are, there are really no others that I can offer in their place. All is uncertainty. All that is, save my conviction that Dame Phillipa's noble and humanitarian labors still continue, no matter under what strange stars and skies.



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